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WINTER 1958-59 VOL. 1

Contents

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BUSINESS HORIZONS

WINTER 1958-59 VOL. 1, NO. 5

ARTICLES

FEATURES


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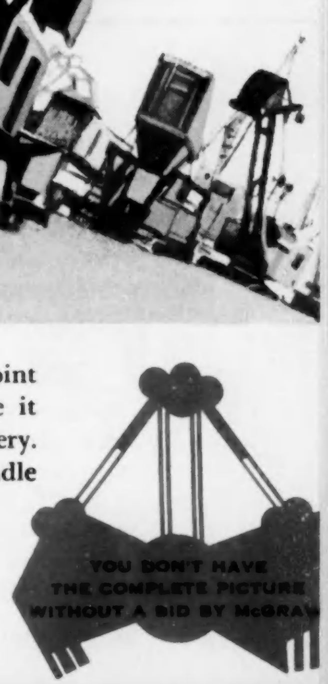
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Articles in Brief

TODAY'S THINKING ON TOMORROW'S MANAGING

RICHARD C. ANDERSON

MOST EXISTING management practices are based on certain principles. While these principles seem rational and are apparently the result of experience, recent developments indicate that a fresh look at them is in order.

Decentralization is merely a management device, and not a *sine qua non* for successful business operation. Management should determine where authority is really needed, rather than insist on decentralization for the sake of decentralization.

Headquarters-field relationships should be established according to the requirements of the individual organization. Whether the "straight line," the "decentralized," or the "functional control" type of organization is used will depend on the circumstances of the particular case.

The *line-staff* concept may be obsolete. Line and staff units each have both executing and service functions to perform.

The *role of the manager* needs to be reviewed, the qualities of a good manager reappraised, and the idea that only the men "at the top" are successful abandoned.

Status and privilege should satisfy the need for recognition, but they should be used as aids to performance, not as favors to the few.

Good communications are a result of sound management, not a cause of it. They require an atmosphere of mutual respect, rather than elaborate programs or "techniques."

THE TWO FACES OF OUR FUTURE ECONOMY

JOHN P. LEWIS

THERE ARE two faces to the future of the U.S. economy. On the one hand, in terms of a domestic economy, freed to pursue its fate without foreign distractions, the country's long-term economic "challenge" would seem to be that of coming gracefully and constructively to terms with the problems of opulence—with a threatening redundancy of output and with issues posed by declining physical toil and increased leisure time. For all their exotic flavor, these may prove to be very real problems.

But such worries may be premised upon an exceedingly parochial view of the world's most favored economy. Seen in a world setting, the primary attribute of the United States' future appears to be not opulence but national insecurity —insecurity stemming not only from the Cold War but from the economic revolutions now under way in Asia, Latin America, and Africa. There is a need to meet these challenges—particularly to help moderate the relative economic inferiority of underprivileged nations as a means of preserving (but narrowing) America's own economic superiority. These needs may maintain the same kind of national security pressures upon output which have operated to varying degrees ever since the beginning of World War II.

Our status in the eyes of the rest of the world is lessened somewhat by the stigma of richness, by our association with colonial powers, and by our reputation for narrow-minded capitalism. But if we are to recognize our opportunities, the productive resources of the United States will prove ample for meeting the challenge posed by the turbulent world around us.

GOVERNMENT EXPANSION: WHY AND HOW MUCH?

Herbert V. Prochnow

Since its origin, the federal government of the United States has progressed through three phases. Prior to 1860, it was primarily a producer of goods and services; from 1860 to 1940, it functioned more as a regulator of business; since 1940, it has become the most important single customer of business.

With the present state of world affairs, there is no indication that the role of the federal government will diminish in the future. Defense expenditures, foreign aid, farm programs and veterans' benefits are all either fixed or increasing expenses. Furthermore, demands for governmental services are expanding in every area—from slum clearance to tariff protection.

Some of these demands involve legitimate functions of the federal government; some do not. But before we complain of the increasing size of government, we should realize that our own demands are responsible for its growth.

The vast changes in our society brought about by increased production, population, and incomes will never permit a return to the type of government sufficient for 1790. However, the average citizen can help ensure that the federal government maintains its proper role by keeping informed, by refusing to join special interest pressure groups, and by becoming an active participant in local, state, and national government.

ARE GROWTH STOCKS REALLY PROFITABLE?

Norman O. Miller

Interest in "growth stocks," stocks that will experience unusually quick growth in market value and in size of dividend payments, has been strong for some time. It is not the case that they are found usually in "growth industries." Some industries are increasing their sales in dollar amounts, but the increase may actually be falling below the rate of expansion of the total economy.

This survey measures the absolute growth of nine major industries in relative profitability, or the rate of profit on total capital. Some facts support the growth industry approach to common stock selection, while others are inconsistent with the idea. A particularly favorable growth trend, for instance, might upgrade fixed assets, but the upgrading could result in increases in labor expense and other fixed costs.

There may be a basic tendency for the more rapidly growing industries to improve their earnings on total capital to a greater extent than industries growing less rapidly, but the tendency is only one of a number of variables affecting earnings and dividends per share of common stock and the value of stock in the market.

The more cyclical industries seem to have better experience profitwise, while rapidly growing industries improve their earnings to a greater extent than do industries growing less rapidly. Other economic trends, such as price inflation and change in intensity of competition, affect the profitability of different industries in varying ways.

INDUSTRY REDISCOVERS THE RIVER

Joseph R. Hartley

Since World War II, there has been a major investment boom in new plants along America's navigable rivers.

To use the Ohio River as a case example, steam generating plants, aluminum smelting plants, steel mills, chemical plants, the atomic energy industry, and metal alloy plants have all rushed to the Ohio Valley to use the river's bountiful water supply and its cheap transportation facilities for coal, petroleum, and other raw materials. The concentration of these basic industries along the Ohio and other rivers is sparking a secondary boom of fabricating plants, such as GE's Appliance Park at Louisville.

This trend is as paradoxical as it is pronounced. The rivers had their heyday during the colonization of America, but went into virtual eclipse after the coming of the railroad. What has caused the sudden revival of the economic use of the inland waterways? Why has barge traffic quadrupled since 1945 while total domestic freight traffic has only increased by one-third?

The rebirth of river traffic is due to fundamental new forces that will cause continuing industrialization of the river banks for many years. Barge transportation service is so radically different from the old steamboat of Mark Twain's time that it is literally a new form of transportation. It now affords dependable, tailored transportation service at a remarkably low cost per ton-mile of bulky industrial raw materials. Not every firm can use river sites for optimal location of its plants, but selection of plant sites will be improved as executives learn the pros and cons of being near a navigable waterway.

A BLUEPRINT FOR LONG-RANGE PLANNING

TULLY SHELLEY, JR./ANDRALL E. PEARSON

PLANNING is an essential ingredient in most successful businesses. With benefits already accruing from short-term programs, it is clear that long-range planning can multiply these benefits. LRP is simply a formalized extension of the decision-making process that goes on all the time in any well-run business.

Accurate prediction of the future is subordinate to establishing well-conceived goals and adequate programs to meet them. If the objectives are well-grounded and realistic and the programs sound, the business will be relatively better off regardless of economic or competitive pressures. In this concept of LRP, success is measured by progress in goals and programs more than by the achievement of projected sales and financial targets.

Long-range plans should concentrate only on key requirements for long-term success. This will help focus management attention and greatly limit the scope of the planning job.

Dealing with major long-term opportunities facing the business will serve the further purpose of avoiding compartmentalized long-range plans. For these major opportunities can only be capitalized upon by establishing over-all goals, subgoals, and programs.

Finally, our approach to practical long-range planning involves:

- Starting with a foundation of knowledge about the industry, the company, and the resulting strengths and weaknesses
- Establishing goals and programs for each major segment of the business (within the industry and company analyses)
- Relating short-term to long-range plans as a means of making better annual plans, and ensuring periodic review and modification of the long-range program

Wasted time is a pitfall to guard against. Excessive fact-gathering and missed deadlines are two byways leading to misused time.

HAWAII—ISLAND PARADISE WITH ECONOMIC POTENTIAL

THOMAS K. HITCH

THE CONCEPT of Hawaii as nothing more than a balmy South Seas paradise is fast becoming outmoded. This may have held true prior to World War II, but since that time the massive change to a modern society and economy has been dramatically swift.

Hawaii, about equal in size to Connecticut, has been able to make this shift with comparative ease because its strategic place in mid-Pacific makes it a convenient stop between the U.S. and the Far East. Its climate is relatively cool and steady, making possible many subtropical industries.

Even though many fields of potentially valuable minerals have been recently discovered in land previously used for agriculture, sugar and pineapple production remain the area's chief industries. The islanders find these, plus the many military installations, to be the main source of employment.

Another great "industry" is the tourist trade. Since World War II the number of visitors has doubled every four years, and there is no indication that this increase will cease.

There are many "diversified" industries in this island chain. Native fruits and flowers give promise of sizable markets in the future, but the largest of these industries are garment manufacturing and furniture making. The one is aimed at the mainland markets, while the other capitalizes on the island market.

Hawaii is relatively recession-proof, since the peculiar properties of the main industries make them fairly stable. The labor picture is better than in many mainland areas although a vulnerable spot is the effect of strikes that disrupt overseas transportation.

Hawaii, then, is a pleasure-filled vacationland with an affluent, modern, and progressive economy. It should soon take its place as the fiftieth state.

ALASKA—FROM FRONTIER TO FORTY-NINTH STATE

GEORGE W. ROGERS

ALASKA, our first noncontiguous state, is an "island" separated from the rest of the U.S. by Canada. This large peninsula between the Arctic and Pacific Oceans contains a land area equal to one-fifth the total area of the other 48 states.

Although the description of its physical characteristics requires superlatives, Alaska's present state of economic and social development is modest. The expansion in population has been phenomenal in recent years, but in 1957 its density was only 0.33 persons per square mile, concentrated in a handful of places. High seasonality is a general characteristic, both in population and in employment.

Overexploitation of resources have combined

to cause a steady decline in the canned salmon, gold, and fur industries, the three main props of the pre-1940 economy.

Since 1940, defense activities and defense-related construction have become the dominant elements in Alaska's basic economy. The expansion of forest products, an "oil boom," and the rapid increase in military and civilian personnel have caused the population rise.

A number of labels have been applied to Alaska in attempts to put the finger on its essential meaning. It has been called "The Last Frontier"; the fighters for statehood characterized it as a "colony" of certain "stateside" interests and the federal bureaucracy; now it will be referred to as the forty-ninth state of the Union.

Alaska is not something that is or has been; it is a promising potential of something that can be. The key to this potential is Alaska's strategic geographic location, which gives its natural resources new significance in the world of today—and tomorrow. Our new state might well become the bridge between its sisters and the other side of the world.

MANAGERIAL OVERHEAD: HANDLE WITH CARE

C. Edward Weber

Many companies are under great pressure to cut costs as a result of the present recession. The expansion of sales has been reversed or slowed down, and the break-even point has become uncomfortably high. The surprising growth of executive and technical personnel in the postwar period makes managerial overhead a prime target in any cost-cutting program.

Arbitrary cuts in the number of managerial personnel can be short-sighted, since the greater ratio of management personnel may be important to the success of the firm. The pursuit and achievement of dynamic goals is dependent upon a relatively larger managerial organization, and may be necessary to insure the profit and well-being of the company. A company that must innovate and adapt to innovation should be building its managerial organization, not tearing it down.

Empire building and indifference to cost may sometimes be responsible for the relative growth. Even in such situations, arbitrary cuts are not an effective way to control managerial overhead. Vital additions to the line and staff may be blocked, and the prestige of larger empires may be inflated. There is no substitute for a systematic and judicious review of managerial overhead. Such a review is admittedly difficult, but it is essential to the leadership of a company.

Behind the Lines

Schuyler F. Otteson

THE WINTER issue of BUSINESS HORIZONS, appearing this month in the mailboxes of 10,000 subscribers, is a "first anniversary" issue. This magazine was launched October 7, 1957, the day an announcement was made at press conferences in New York and Chicago that a new business magazine, aimed at the decision-makers on the American economic scene, was about to make its appearance.

This anniversary issue is representative of the stature that BUSINESS HORIZONS has attained during the first twelve months of its existence.

We add, in this issue, to our growing list of distinguished contributors. From men who are working in the fields of education, business, government, labor, and industry, we have assembled nine articles and the "Consultation," a feature found only in this periodical.

The roster of contributors includes professors from three universities, vice-president of the First National Bank of Chicago, an organization counselor for U.S. Steel, two management consultants, a research director for the Hawaii Employers Council, and the chairman of the Alaska Field Committee.

In addition, industry, government, and labor are represented in "Consultation" by two company vice-presidents, two federal officials, and four union officials, including two union presidents.

Richard C. Anderson brings his experience as personnel manager and organization

counselor to a re-evaluation of management practices in the article "Today's Thinking on Tomorrow's Managing."

Mr. Anderson is now Organization Counselor for the U.S. Steel Corporation; he has also served as personnel manager for the Electronic Manufacturing Company, executive secretary of the California State "Little Hoover Commission," and special assistant to the city manager of Oakland, California.

He holds an A.B. degree from Fresno State College and an M.A. degree from the University of California.

The author of "The Two Faces of Our Future Economy," **John P. Lewis**, is a Professor of Business Economics and Public Policy in the School of Business, Indiana University. He received his A.B. degree from Union College and his M.P.A. and Ph.D. from Harvard.

During 1950-53, Mr. Lewis served as a member of the staff and assistant to the chairman of the Council of Economic Advisers, Executive Office of the President; in 1953 he was Economic Consultant to the United Nations Korean Reconstruction Agency. Among his writings are two books, *Business Conditions Analysis,* to be published soon by McGraw-Hill, and *Reconstruction and Development in South Korea,* published in 1955 by the National Planning Association.

Herbert V. Prochnow is eminently qualified to discuss the role and influence of government in business. In addition to his Ph.D. in Finance from Northwestern University, he holds several honorary degrees. He has held such varied positions in government and business as consultant to the Secretary of State; Deputy Under Secretary of State for Economic Affairs; Alternate Governor for the United States of the International Bank and International Monetary Fund; chairman of the United States delegation, General Agreement on Tariffs and Trade, Geneva, 1956; and member of the United States delegation, Organisation for European Economic Cooperation, Paris, 1956.

At present, he is General Vice-President of the First National Bank of Chicago; director of the annual Summer School of Banking, University of Wisconsin; Vice-President and Director of the Chicago Association of Commerce and Industry; and Secretary of the Federal Advisory Council of the Federal Reserve System.

His books include *The Next Century is America's, American Financial Institutions,* and *Determining the Business Outlook.*

Norman O. Miller is the author of "Are Growth Stocks Really Profitable?" He has published several studies in economics, including "Section X, Financial Institutions," of *Indiana's Economic Resources and Potential,* which he coauthored with H. C. Sauvain.

An Assistant Professor of Finance at the University of Texas, Mr. Miller is a graduate (B.S. and M.B.A.) of the University of Oklahoma. He received his D.B.A. from Indiana University.

To his growing list of publications in the transportation area, **Joseph R. Hartley** adds this month's article "Industry Rediscovers the River." Previous publications include *The Effects of the St. Lawrence Seaway on Grain Movements,* "Getting the Most from Traffic Management," and "The St. Lawrence Seaway—A New Erie Canal?"

An Assistant Professor in the Department of Transportation, Indiana University School of Business, Mr. Hartley has served as a staff assistant to the Director of Transportation, Air Materiel Command Headquarters of the United States Air Force.

Mr. Hartley, a member of Beta Gamma Sigma and recipient of an Earhart Fellowship, received his B.S., M.B.A., and D.B.A. degrees from the Indiana University School of Business.

The Editor of "Consultation" for this issue is Fred Witney, Associate Professor of Economics, Indiana University, who has had long experience in the field of

labor relations. He is a member of the Panel of Arbitrators of the American Arbitration Association and the Federal Mediation and Conciliation Service.

Members of the panel that discussed "Organized Labor in the Decade Ahead" were:

James B. Carey, President, International Union of Electrical, Radio and Machine Workers

Ewan Clague, Commissioner of Labor Statistics

Howard M. Dirks, Vice-President, Carrier Corporation

Joseph F. Finnegan, Director, Federal Mediation and Conciliation Service

Pat Greathouse, Vice-President, International Union, United Automobile, Aircraft & Agricultural Implement Workers of America

David J. McDonald, President, United Steelworkers of America

William F. Schnitzler, Secretary-Treasurer of the American Federation of Labor and Congress of Industrial Organizations

Richard B. Stoner, Vice-President, Cummins Engine Company, Inc.

Tully Shelley, Jr., and **Andrall E. Pearson** collaborated on the study "A Blueprint for Long-Range Planning." They are associated with McKinsey and Company, Inc., of New York City, management consultants.

Mr. Shelley has worked with a number of companies on manufacturing problems, production planning, and long-range planning studies. He received his B.S. degree in electrical engineering from the U.S. Naval Academy and served in the Navy during World War II. Before his present position, he worked in plant management with the Scovill Manufacturing Company.

Mr. Pearson received a B.S. degree from the University of Southern California and an M.B.A. from Harvard Business School. During World War II, he served as a naval officer. He has been associated with the Goodyear Tire & Rubber Co. and Standard Brands, Inc.

The Director of Research for the Hawaii Employers Council, **Thomas K. Hitch,** draws on his knowledge of the Hawaiian economic and labor picture for his article "Hawaii—Island Paradise with Economic Potential." Before coming to his present post, Mr. Hitch was on the staff of the President's Council of Economic Advisers. He is a former member of the faculty of Stephens College and has served as a naval officer.

A Phi Beta Kappa, Mr. Hitch received his A.B. degree from Stanford University, his M.A. degree from Columbia, and his Ph.D. from the University of London. He has published many articles and has served on numerous territorial commissions.

Alaska is brought into perspective as a state in "From Frontier to Forty-ninth State" by **George W. Rogers,** who has made his home in Alaska since 1945. The Arctic Institute of North America employed Mr. Rogers in 1956 to conduct a long-range study of strategic social and economic factors in Alaska's development. The first completed phase of the study, covering southeastern Alaska, is scheduled for publication soon by the Johns Hopkins Press.

Mr. Rogers has been employed by the Department of the Interior as adviser to two governors and as chairman of the Alaska Field Committee. He received his A.B. and M.A. degrees in economics from the University of California and his Ph.D. from Harvard University.

Edward C. Weber, in his article "Managerial Overhead: Handle With Care," has drawn on his research since 1955 on problems related to the managerial ratio. The studies were made at both Princeton University and the University of Pittsburgh. Now an Assistant Professor of Industry in the School of Business Administration at the University of Pittsburgh, Mr. Weber was a member of the Research Staff, Industrial Relations Section, Princeton University.

Mr. Weber received an A.B. degree from the University of Illinois, an M.A. from the University of Illinois Institute of Labor and Industrial Relations, and a Ph.D. from Princeton. He was coauthor of a University of Illinois Publication "Workers on the Move: Labor Turnover in a Defense Economy." He also has published several other articles.

This issue's "Technological Horizons" was written by **Charles W. Hagen, Jr.,** Associate Professor of Indiana University's Botany Department. A Phi Beta Kappa, Mr. Hagen received his degrees from Cornell University (A.B.) and Indiana University (Ph.D.). He has published technical papers in plant physiology and other areas of biology.

How does Jonesy rate all this?

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BUSINESS HORIZONS

"... the people of one organization are more effective than those of another because the organizational structure enables them to work as a more effective team and because the organization's philosophy gives them a better approach to problems."[1]

Today's Thinking on Tomorrow's Managing

RICHARD C. ANDERSON

WE SPEND untold billions probing mysteries of the physical world, and we modify our manufacturing processes only after the most minute analyses. In the realm of human affairs, however, we change organization structure, transfer people from job to job, and otherwise deploy human effort with little understanding of the implications.

The management of business enterprise is a complex of people, materials, and money. Success in business management requires an intricate balance of these forces, and it is becoming increasingly apparent that a company's administrative framework will determine how well this balance is achieved. Two fundamental aspects of that framework are: (1) the organization structure, and (2) the concept of the management process—the management philosophy.

Mr. Anderson is the Organization Counselor for the United States Steel Corporation.

DEPLOYING MANAGEMENT

Organization structure is simply the means of assigning responsibilities among the various segments of an enterprise. The critical element is balance, with each activity placed in a proper relationship with every other activity.

[1] Harlow F. Curtice, *The Development and Growth of General Motors.* In a statement prepared for Hearings before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, Pursuant to S. Res. 61, Part 7, General Motors; U.S. Senate, 84th Cong., 1st sess.

The criterion for assigning authority and responsibility must always be what is necessary to achieve the company's objective.

Present practices of organization rest on a set of concepts, or "principles," which seem rational and which experience has verified in some measure. But recent business developments have shed new light on these concepts.

Decentralization—Fact and Fancy

The term decentralization has two meanings in business organization. It refers (1) to geographical dispersion of facilities, and (2) to delegation of management responsibility. These two meanings are related since dispersion of facilities may require greater delegation of responsibility. But they present two distinctly different problems. The decentralization of facilities is beyond the scope of this discussion except where it is entailed in management decentralization.

Management delegation revolves around the question of how authority should be distributed along the "chain of command." If most authority resides at the top, the organization may be characterized as "centralized"; if at the bottom, "decentralized." No organization is absolutely centralized or decentralized; the most that can be said is that one may be predominantly centralized and another predominantly decentralized.

Decentralization is merely a device of management, not a symbol of untarnished virtue. If the organization benefits from a high degree of local autonomy, decentralization is beneficial to it; if not, it is harmful. Experience shows the wisdom of delegating authority as near to the point of execution as possible. But each situation presents its own peculiar requirements.

We are attracted to decentralization by nostalgia for those golden days of yesteryear when "every man was his own boss," and we seek to recapture what we believe was the creativity of the small proprietorship. The individual proprietor had a personal stake in his company; he wanted it to succeed because it was *his*. Usually, profits could be traced directly to his own efforts. But when we try to re-create these conditions, we encounter two serious obstacles. First, while a unit remains part of a larger organization, these conditions cannot be duplicated precisely. The central organization must exercise some control—and thus restrict the subordinate unit's autonomy —or it has no reason for retaining the unit. Second, we have exaggerated the motivation and drive of the individual entrepreneur. Even if this motivation were as intense as we have idealized it, it did not apply to a large number of people. The vast majority of people (within the span of time that affects us today) have always been employed by someone else; and the problem of motivating people was as critical then as now.

Satisfaction derived from the giving of one's self in an atmosphere of mutual respect and acceptance is and always has been the strongest motivation to performance. It is only as we understand this condition and create this atmosphere that we release the full potential of human effort.

It is sometimes contended that decentralization stimulates greater effort by holding one "accountable for results." There is much truth in this, but such effort results more from a soundly conceived alignment of responsibilities than from decentralization alone. The purposes of business are not served by engendering a spirit of separateness—which too often results from decentralization. Size alone is a divider, and the need for cohesiveness is perhaps all the more compelling where decentralization is most likely to occur, that is, in the large organization. Thus, while decentralization may be absolutely necessary in the large concerns, coordinated control is equally necessary.

This seeming dilemma of decentralization becomes a question of management philosophy. A democratic management in which each individual is respected for his inherent worth builds group loyalty and permits greater delegation of authority. Autocratic management, on the other hand, with the chief executive as fountainhead of all wisdom, limits the possibility of decentralization.

The guiding principle in organization should be the adequate assignment of responsibility, not dogma on centralization or decentralization. The criterion should always be: Where is authority needed in order to carry out the activity? For some activities, authority must rest at the top; for others, at the bottom. Which should be where, and in what degree, can be decided only by the facts of each case.

The Headquarters–Field Relationship

The relationship between headquarters and field poses one of the most difficult of all management problems. Three types of relationships can exist.

First is the "straight line" organization. Here the headquarters sales executive, for instance, has direct charge of all sales. The field sales organization could be divided into districts with a sales manager for each district. When sales is the only field activity, this system is fine. As district operations expand, a district manufacturing manager may be added. We then have direct headquarters supervision of both sales and manufacturing. When districts are not too widely dispersed, this may be satisfactory; but when local sales and manufacturing must be coordinated, headquarters control becomes extremely difficult. A single district management then becomes necessary.

Second is the "decentralized" form of organization. Here a district manager, usually reporting to the chief executive at headquarters, is in charge of all district operations. If there is still a headquarters sales executive, he becomes responsible for company-wide sales policies, and advises both the district manager and the chief executive. He has no direct authority over district sales activities except for that delegated by the chief executives in specific situations. The headquarters sales executive thus becomes a planner and an adviser.

The district manager has full charge of his district. He is accountable for total results in his area and is in a position to adjust policies to local conditions. But this plan also has its disadvantages. District results will reflect the individual differences of district managers. District autonomy may improve coordination within districts but decrease coordination between districts.

A *third* type of headquarters-field organization has evolved to resolve the difficulty of district autonomy versus headquarters control. This is often called functional control. Here the headquarters sales executive controls district sales activities; the manufacturing executive controls manufacturing activities; the purchasing executive controls purchasing activities, and so forth. The district manager merely coordinates the local aspects of these various activities; yet he is responsible for over-all performance. This system pools specialists in the headquarters, specialists whom any one district could not afford; it applies policies uniformly throughout the company; and it retains direct accountability for each activity. But it also has some serious disadvantages. The district manager does not have sufficient authority over local activities to control attainment of prescribed objectives. Also, he has several bosses, as do the district sales and production people.

Thus, the headquarters-field relationship creates a dilemma. In the first instance, headquarters control weakens local coordination. In the second instance, local control weakens company-wide coordination. And in the third instance, multiple reporting responsibilities complicate interdepartmental relationships.

Coordination is the basic need in headquarters-field relationships. If district coordination is essential, a strong district management is called for. If company-wide coordination is paramount, a strong headquarters organization is preferable.

The circumstances in each case should determine which method is best, but in no case should the features of one be mingled with those of another. If the second method, coordinated district management, seems best, headquarters specialists should not be charged with results in the districts. If functional control is used, the district manager cannot be held fully accountable.

Where conditions require a district operation, district organization of the second type is probably the most satisfactory. The district-type organization is flexible. For example, if sales is the main effort, districts could be placed under a headquarters sales executive. The district manager then becomes, in effect, a district sales manager. Other activities would be coordinated with sales at the district level.

Line-Staffs: Obsolete?

Organization structure is often divided between executing activities (line) on the one hand and service activities (staff) on the other. This distinction between activities has become cemented into the organization *structure,* whereas the real distinction is between *activities.* Separating organization units in this manner has created an artificial cleavage and crippled the effectiveness of organizations. Service units, for instance, are considered to have no executing responsibilities. This limits the usefulness of these so-called "service" units and destroys the organization's balance. The truth is that each specialty, whether it be selling, buying, accounting, or interviewing job applicants, does have an executing responsibility. An organization is a group of collateral activities, each sharing in the total endeavor and each having both authority and responsibility for accomplishment within its own sphere. The well-balanced organization does not require that "second-class citizens" wait upon others to breathe life into their existence.

Management, in dividing activities, says to each unit: "You are to become a specialist in your assigned responsibilities and to perform these responsibilities for the maximum benefit of the total enterprise. You will be accountable for results in your own sphere. You will coordinate your efforts with others in the organization who are also specialists in their spheres. Certain of your responsibilities, such as providing your people with adequate materials and supplies, will be performed for you by a centralized purchasing department because centralized purchasing permits economies. Other units, such as personnel, will administer company-wide compensation plans with which you must comply; and they will also assist with recruiting and other personnel needs. We think you will find their assistance valuable because they can identify problems and recommend solutions that may escape you. If you use their services and if they fail in their responsibility, they will be accountable. If you fail to use their services, you will be accountable for failure, not only in your own sphere, but in the spheres in which other people specialize."

When the purpose of specialized activities is explained in this manner, many problems of interdepartmental relationships disappear. The concept of collateral responsibility does not destroy anyone's rightful authority nor prevent holding anyone responsible for accomplishment. It merely assures that responsibility for accomplishment rests with the individual best qualified to accept it, namely the one who specializes in it. Shortcomings can be traced to the unit responsible regardless of where they appear. For instance, failures resulting from inadequate materials can be traced to the purchasing department, and loss of sales resulting from slow delivery can be traced to the traffic department.

One unfortunate consequence of emphasizing distinctions between service and executing activities is that the one is expected to "sell" its services to the other. This is an artificial and self-defeating approach to the full utilization of personnel. Top management must identify each unit's responsibility and make it clear that each unit has a specific accountability. One unit should not have to justify itself to another: Once it has been established, that should settle its reason for existence.

When activities are specialized, each organization unit is free to concentrate on its assigned job. When it attempts to perform an activity in someone else's sphere, it weakens its own job as well as that of the other activity. Thus, when a production man tries also to become a buyer, he waters down his own job and also interferes with the effective execution of the purchasing activity.

Each segment of the enterprise has two types of responsibilities: *First,* it executes programs, and *second,* it supports others in the execution of theirs. For instance, solicitation is normally considered an executing activity. But the solicitation specialist does more than sell products; he also gathers information on market conditions, competitive relationships, and consumer activity. Thus, the executing unit supports market research specialists (service). Again, purchasing (service) procures materials and supplies, but also receives support from others: money from finance, people from personnel, and so forth. Thus, every segment has both executing and service features.

Confusion in relationships also arises from the concept that "authority" resides only in executing units, with service units having only an "authority of ideas." While some so-called service units trade heavily in ideas, this distinction is not valid. Authority always resides with an *activity;* and even though a unit's primary purpose is to support others, it must have authority within its own sphere. There should be no greater difference between the authorities of "executing" and "service" units than there is between two "executing" units.

Failure to establish this type of collateral accountability prevents full collaboration among units and leads to unbalanced decisions. For example: A company spent $15 million for a producing facility on the strength of evidence that a market was available. A market was there all right, but the methods for reaching it were foreign to the company's experience; and the project foundered. Another company (a food processor) decided to add a line of small appliances. Surveys promised a tremendous market. The company acquired manufacturing facilities and launched its new venture with hope and optimism. However, it soon became apparent that selling appliances was not the same as selling food. The company was not prepared for the competition it encountered and finally dropped the new line. Had these two companies used all their specialized knowledge in the first place, their failures might have been avoided; thorough analysis by all parts of the enterprise would have revealed the potential dangers.

Interdependence—not separation—is the key. The value of each unit should be measured by its contribution to the whole, not by performance of its own activity alone. The famous words of Supreme Court Justice Oliver Wendell Holmes that no man has a right to shout "Fire!" in a theater, express the type of responsibility required in management. Each unit has a responsibility to the whole as well as to itself. The segments of an enterprise are fused together like the colors of a spectrum. Distinct at one point, they flow together at another; and they are all part of an over-all pattern.

The executing and service activities have traditionally been referred to as "line" and "staff," respectively. It is time to abandon these labels as organizational distinctions and replace them with the concept that each unit has elements of execution and service, and that each has a collateral responsibility to further the best interests of the total organization.

DEVELOPING MANAGEMENT

We hear on every hand that the next frontier in business development will be the greater use of our human resources. But if we are to unleash the power locked within the human personality, it is high time to re-examine the foundations of our management philosophy.

Business organizations exist to meet human needs, and management must reflect this purpose. The management job may be considered from two points of view: external and internal relationships.

Externally—to the community it serves—the test of success is the precision with which the company calculates a need and mobilizes its resources to satisfy that need. Profit, that essential ingredient in business enterprise, thus becomes a measure of how well human needs are satisfied.

Internally—to the community within—the

test of success is *not* the sentimental compulsion to make people "happy," nor is it that most recent form of paternalism, the employee "benefit" program. It is, rather, the degree to which management promotes a creative atmosphere conducive to the utmost use of individual capacities.

The Manager: A New Perspective

Some years ago James Burnham in his book, *The Managerial Revolution,*[2] pointed out that managers have become the leaders of our society. Who is this new species of ruler and what does he do? Management is a separate and distinct activity much like engineering, medicine, or salesmanship. When a person becomes a manager (we shall define a manager here as a person who directs the activities of other people) he is faced with problems different from any he encountered as a nonmanager. The particular functions of management have been described in various ways, usually including organizing, planning, staffing, executing, and appraising. This does not mean that nonmanagers have no occasion to plan, execute, or conduct any of the other activities associated with management; but they are management's primary responsibility just as a buyer's primary responsibility is to procure goods and services. Also, these activities of management may or may not consume the manager's full time; that is, he may or may not perform some of the same tasks as the nonmanagers associated with him. But whether or not he does have some activities in common with the nonmanager, he will have additional responsibilities that nonmanagers will not have. The particular responsibilities which distinguish the management job from others have made of management a specialized line of endeavor.

Specialization can be considered in two ways:

- *First,* dividing a job into its minute parts—as Charlie Chaplin's assembly line cogs, or the eye, ear, nose, and throat doctor who specialized in the left nostril.
- *Second,* focusing the individual's efforts on those activities for which he is best suited.

The question is not whether we should have specialization. Specialization has always been and will continue to be a fact of life. It remains only to determine the most effective use of the specialist.

The line of promotion for most positions is a supervisory job; and if an employee wishes to improve himself, he usually must leave his own specialty and attempt to become a specialist in management. This frustrates a large number of employees, since by mathematical odds they can never become managers. It also weakens the quality of supervision. The technician is "rewarded" by an appointment to management, an activity for which he often has no training and, in many cases, no inclination. Competence in another specialty is, of course, no barrier to management. Indeed, most outstanding managers have been technicians in other fields. But the successful engineer is not automatically a good manager any more than a successful salesman is automatically a good chemist. Managers should be selected for demonstrated managerial ability or aptitude, not for achievement in another specialty.

Management skills are vital, but an organization does not live by management alone. Some management positions may contribute more than other positions; and if so, this should be fully recognized. But some subordinate positions may be of greater value than the position supervising it. The administration of hospitals and some research organizations recognize this possibility.

Proficiency in a specialty should not be lost through an unbalanced view of it, nor should the nonmanagement specialist be penalized for remaining with his specialty. Each specialist should be rewarded in income and status according to his contribution to the enterprise, and he should be encouraged to remain in his own specialty if he so desires.

[2] James Burnham, *The Managerial Revolution* (New York: The John Day Co., 1941).

The other side of this coin is that we have concentrated on developing other specialties and neglected the specialization of management. We are giving increased attention to management development, but most development programs consist of rotational assignments among other specialties. Rotation is presumed to make "generalists" by exposing prospective managers to a variety of work. While variety is valuable, the type of rotation usually employed—transferring the candidate from one department to another—assumes that knowledge of activities is all important.

True, the more activities a manager knows, the better for him; but he cannot have a detailed knowledge of all activities. Development programs should concentrate on acquiring management skills and arranging rotations for varieties of management, not just for varieties of activity.

To develop successful managers, we must do two things: (1)broaden the opportunity within all specialties; and (2)develop greater competence in the management specialty. We must also abandon the notion that only the men at the top of the organization ladder are "successful." The successful individual is the one who receives satisfaction from his work and contributes the fullest measure of himself wherever he may serve. He may be a shipping clerk, a department manager, or a vice president.

In the search for management yardsticks we have depended heavily on formulas. A manager, we say, must have character, must be reliable, must "understand" others, must "think straight," must be a "go-getter," must have initiative, and all manner of other virtues. These pious declarations are a little like Home and Motherhood: We are all for them and against Sin. They do not tell us how the manager gets the way he is or how these qualities aid him. It is about as helpful to tell a manager that he must have initiative as it is to tell a woman that she must be beautiful: Both are worthy objectives, but they shed little light on how to do the job. There is a spark of fire in the leader that stimulates cohesion of efforts, but as yet we have identified neither the qualities that create this spark nor a method for developing them.

Some personalities seem better able than others to develop the broad perspective required in creative management. If we could discover how the successful manager thinks and why he acts the way he does, we should be closer to understanding the creative drive that gives life to the management process. We would do well to look at the manager's conduct as a guide. For instance, has he taken some highly capable subordinate and provided him opportunities to demonstrate his capacities; or has he supported him in controversy on unpopular issues? When we can build a management group that motivates its members to the full expression of their capacities, we will have established a creative management atmosphere.

Status and Privilege: Boon or Boggle?

Status can be defined as the place a person holds in a society. It can be a place of esteem or of scorn, and it can be earned or unearned. It can be held securely and it can be revoked. In short, it is a degree of social acceptance or rejection.

Status may take two forms: first, status attaching to a position (such as the office of the President of the United States); second, status attaching to a person. Status connected with a position falls upon the person who occupies that position, but falls from him when he leaves it, except as he has enhanced or diminished his personal status by his performance in that position. Status connected with the person as a person remains with him regardless of his position, so long as the condition that created it continues to exist. The organization cannot change or alter status attaching to the person; although it does provide the individual with opportunities to enhance it.

Status is conferred upon a position to facilitate its performance. When a person has earned the position, he is entitled to the status; if he has not earned it, he receives it anyway

because the position requires it. It is particularly important, however, that the person be qualified for the position since the quality of his performance will greatly affect the position's future status.

Status attaching to the person will be conferred only when that person earns it by some display of ability or courage or by some achievement. Status varies with the values of associates; thus while one group will confer status for one condition, another group with different values will be unimpressed by that condition.

Methods of conferring status. There are two ways to confer status to a position. The first is by organizational location. Here the position is placed in an organization structure; certain duties are assigned to it; or certain titles are conferred upon it.

The second way to confer status involves conditions of work. For one position a private office is provided; for another, an automobile, and so on. These conditions of work become symbols of status; and in the sense that they are rights enjoyed by one individual, they might be called privileges. Some of these privileges are functional; that is, they facilitate performance of the job. Others are nonfunctional and do not contribute to performance. One privilege may be functional for one type of job and nonfunctional for another. When conditions of work do not serve the purpose of the job; that is, when nonfunctional privileges are conferred, artificial status results. The use of a company automobile by salesmen is a functional privilege; that is, it is essential to the salesman's job. The same privilege may be nonfunctional when granted to a headquarters officer whose total time is spent in the headquarters office.

There can be no objection to the granting of privileges—even to the special arrangements for compensation brought about by existing tax laws or to the plush environment deemed desirable for outward appearances in some positions—when they serve a purpose; that is, when they are functional. But status bestowed by nonfunctional privileges encourages aspiration to positions with an undue emphasis upon these privileges.

The basic questions are these: What privileges serve the organization's purposes? What does the job require? For example, a salesman needs a company car, an employment interviewer needs a private office, and the president of the company, who should be free from concern with routines, may need a chauffeur. Many conditions may be conferred simply to relieve nervous strain. Such privileges are basically tools of the job, like a carpenter's hammer is a tool of his job. They help achieve the organization's objectives. But privileges that contribute nothing to performance have no place in the business organization.

Status satisfies a basic need for recognition. Each individual must satisfy this need in his own way, but the most creative approach would emphasize one's personal development and the contribution one makes to the wellbeing of the organization. The thing to be aimed for is full opportunity for self-expression in all positions.

Communications: Some Misconceptions

The increasing emphasis on communication in recent years reflects a need for unfettered human relationships. Communication may be described as the transmission and receipt (including comprehension) of thought, instructions, or information. Interest in communications signifies a growing awareness that easy human exchange is a true test of management.

The increasing size and complexity of business has complicated communication, but poor communication results more from a misconception of the management process than from organization size alone. Efforts to resolve the inadequacies of communication through "programs" or "techniques" without an attempt to correct the underlying conditions are doomed to failure.

A prime requisite of communication is availability, which means simply contact with one another in an atmosphere of mutual respect and consideration. In large organizations it is impossible for all individuals to have

access to all others; but such access is really not essential, and even in very small organizations it is not practiced. The important thing is that each member has sufficient access to the necessary people. Organization size need not be a handicap in this respect. (Size in fact is more often an excuse than a reason.)

Good communication is a result of sound management, not a cause of it. It requires a management atmosphere in which the individual is respected for what he is and in which he is encouraged—indeed, expected—to contribute his maximum capacity. Face-to-face contact itself does not guarantee good communication. There must also be a mutual acceptance, a willingness to receive as well as transmit, and a recognition of the sender's and the receiver's circumstances. In the proper atmosphere, free exchange flows as naturally as breathing; without this atmosphere communication "programs" are futile. "Real communication occurs when persons or groups voluntarily face a problem or an experience together; when they make genuine efforts to listen and to understand each other's ideas or interpretations of that experience or problem; and when they come hopefully to agreement and acceptance of the ideas in question." [3]

The essential ingredient in communication is a mature understanding of human relationships. If we are to improve the art of communication we must develop this understanding.

[3] Ordway Tead, "Business Leadership in the Decade Ahead," *Advanced Management*, XX (February, 1955), 8.

In an ideal management atmosphere we would find several conditions. *First,* information would not need to flow through the "grapevine." People would find out what they needed to know, not just what others thought they ought to know. *Second,* individuals expected to administer programs would be consulted when these programs were being developed. *Third,* important decisions would be made only after consideration of all points of view. The weight-of-evidence decision would replace the wave-of-the-hand decision. *Fourth,* status or position would be no barrier to effective collaboration.

CONCLUSION

Management is both creative and systematic. It can be studied and incorporated into the individual's knowledge. It can be practiced; and with experience practice can lead to improvement. But it also must be "felt," and the management personality must embrace emotional as well as intellectual disciplines.

The manager of the future will continue to marshal the instruments of production for the satisfaction of human needs and for the improvement of man's physical environment. His enterprise will be planned and organized in accordance with orderly management methods. But he will add another dimension: The enterprise's human resources will be developed, the individual personality will find increased creative expression, and the fields of anthropology, sociology, and social psychology will become legitimate arms of the business enterprise.

This is the first in a series of two articles by Mr. Anderson on organization for management. The second article, which will discuss the role of the assistant in the business organization, will appear in a future issue of Business Horizons.

John P. Lewis

The Two Faces of our Future Economy

Whether we like it or not, the state of our economy will affect and be affected by the whole world.

The future of the U.S. economy, it sometimes strikes me, is Janus-faced. It wears two masks. From a domestic perspective, it may look a little fatuous and overfleshed, but it smiles back at us benignly. Widen our awareness to the world around us, however, and the face of the future positively scowls. But in so doing, it poses some exciting challenges. Personally, I find the sterner of these two countenances the more appealing; all but the most sophisticated among us really would rather play out our real life roles in a melodrama than in a comedy of manners. But both physiognomies have fascinating features, and I would like to juxtapose some of them.

Our subject, of course, is the appearance of the longer-run future over the next several decades, not the business outlook for a coming year or two. There is no need to linger over the fact that there is actually precious little that the economist can decisively say about the long-run economic outlook; that his specialized knowledge is likely to illuminate the subject less than that of the astrophysicist, medical researcher, or student of international affairs; that, at most, he can offer a rather eclectic set of observations about certain developmental possibilities, about some of the factors that may accelerate or decelerate growth, and about a few of the challenges with which possible economic changes may, in turn, confront the community.

Furthermore, we may bypass all discussion of circumstances that may in the United States in coming decades upset the projections of long-term capacity growth, which have become such a commonplace of popular economics and of government and business policy planning. These upsetting possibilities, as I see them, include the chances of unexpected population developments, of changing attitudes toward work and leisure, of constricted material and energy resources, of an altered pace of technological change, of changes in the disposition to save, of shifts in the economy's

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product mix, and of lags in the provision of the public services and facilities needed for underpinning private economic growth.[1] But our premise here shall be that the popular projections of continuing buoyant growth in the productive capacity of the American economy can be taken at least somewhat seriously. The question then becomes: What are some of the implications of a continuing average annual increase in U.S. labor productivity of 2-3 per cent for several decades yet to come?

THE DOMESTIC IMPACT OF ECONOMIC PROGRESS

In citing some of the problems that continuing material progress may generate within the economy, one runs the risk of seeming to carp. By conventional standards, most of the fruits of continuing economic progress in the United States should be eminently desirable. The persistence of historical productivity gains for another generation should virtually eliminate the age-old specter of poverty from the nation's domestic scene, unless we are singularly unsuccessful as a community in making an income distribution of these gains that will support adequate use of our expanding productive ability.

As a matter of fact, we already have reached a stage where most of the lowest-income households in the country constitute various kinds of special cases—retired persons whose living standards are not as low as their current incomes, married students, widows with young children, physically or mentally handicapped persons, members of minority groups, and economically immobile small farmers, especially in the Southeast. During the coming generation, if the typical economic growth projections should be realized, we certainly shall have the national wherewithal (if we also have the legislative and other types of determination it will take), wholly to eliminate such pockets of poverty without any significant leveling of income differentials. This will represent an enormous achievement. For the first time in the world's history, a major economic system will have succeeded in supplying all of its people with material requirements far above the subsistence level. At the very least, continuing economic progressiveness will solve as many problems as it generates—and many more of the elemental ones.

But, as J. K. Galbraith and others have lately begun to emphasize, problems will be generated.[2] One will be that of maintaining, mainly through the price-wage-profit mechanism, a distribution of productivity gains that will stimulate not only continuing expansion of productivity and capacity but a matching growth in markets.[3] However, even if we assume that nothing will happen to the distribution of further productivity gains to interfere with market expansion, this basic question remains: May not the appetite for goods and services of Americans at all levels in the income distribution become progressively jaded as they become more and more opulent?

An Embarrassment of Riches?

No support for the hypothesis of a secularly declining average propensity to consume is to be found in American historical statistics. Such estimates of aggregate income and consumption as we have suggest that since the late nineteenth century Americans have increased their consumption just about in proportion to their spendable incomes—not because they have had an insatiable appetite for the consumer products of 1880, but because of the ceaseless appearance of new and improved products. If such product innovation continues unabated —and why not?—is not any subsidence in the secular growth of consumption quite unlikely?

[1] These growth-inhibiting or, at least, growth-altering possibilities are discussed at some length in chapter 24 of the book, *Business Conditions Analysis*, by John P. Lewis, to be published by McGraw-Hill Book Co., in early 1959.

[2] See J. K. Galbraith, *The Affluent Society* (Boston: Houghton Mifflin Co., 1958).

[3] For a discussion of this problem, see John P. Lewis, "Pricing for Stability and Growth," *The Relationship of Prices to Economic Stability and Growth*, Compendium of Papers Submitted by Panelists Appearing before the Joint Economic Committee, March 31, 1958; Joint Committee Print, 85th Cong., 2d sess. (Washington: U.S. Gov't Printing Office), pp. 375-96. See also chapter 25 of *Business Conditions Analysis*.

Perhaps so; there is much sense in this view. And yet the whole century of American experience from which this ever-onward-and-upward view of per capita consumption is drawn may turn out to be a terminable episode in the longer sweep of history. Other societies much less efficient than ours in serving the material wants of their inhabitants nevertheless have shown much less preoccupation with material welfare. Surely it is possible that this preoccupation will wane in the United States if rising productivity persists. It is possible that the marginal utility of all personal consumption goods and services, and not just of particular items or categories within the total, will begin to decline.

If we are talking about the very long run in a tranquil America untroubled by the world outside it, this last strikes me as a plausible hypothesis. Evidently it strikes a great many contemporary business writers the same way. For again and again one encounters the suggestion that our "ability to produce" threatens to outrun "our ability to consume" and that during the coming generation, therefore, the key business function will be that of marketing. According to this thesis, business must advertise more intensively, subtlely, and effectively than ever; must teach housewives to throw things away faster; must speed up its creation of new status symbols and accelerate the obsolescence of existing consumer durables. In short, to stay economically healthy, Americans must, through the beneficent intervention of Madison Avenue, force themselves to gobble up far more consumer goods and services than they would if left more to their own devices.

Although there is really nothing professional that an economist can say about such a line of "social policy," personally I find it rather vulgar. It sounds like solving the farm problem by giving everyone a tapeworm. If the marginal propensity to consume should begin to sag as productivity rises higher and higher, other more sensible social adjustments would be possible. For one thing, even after appetites for additional personal consumption became relatively jaded, many unrequited wants for collective consumption in the form, for example, of more elaborate public educational and recreational facilities and services, would remain. Furthermore, the economy may decide in favor of substantially more leisure. With a little good management, it should be perfectly possible for this to occur without unstabilizing the results. Whether a large expansion in leisure time would be healthy or demoralizing for the society is another and more difficult question. However, let us first consider some of the effects that a continuing productivity advance might have, not only on the propensity to consume, but on the organization and staffing of productive activity. For these, too, will have a bearing on the leisure time problem.

The Impact of Continuing Mechanization

For hundreds of thousands of years human muscular strain was a major input for most productive processes. This is rapidly coming to an end in the United States, which in another generation may almost literally be a "no-sweat" economy as far as remunerated activities are concerned. Hard labor in the old physical sense is rapidly disappearing from manufacturing, distribution, and agriculture, and it is diminishing in construction. Manual labor in general is on the decline; we may move toward a condition in which very few of the labor force, other than certain professional and artistic groups, will earn their livings with hand tools.

Such a minimization of physical toil has, like abundant mass consumption, been an ageless human goal. And yet, like productive abundance, it may aggravate certain problems. The most obvious of these will be the danger of increasing physical softness and flabbiness in the American people. However, I should guess that the psychological effects might be even more disturbing. Every society, to meet its challenges successfully, must have a fair amount of discipline. Its members must have well-formed habits of doing difficult and unpleasant things they think they "ought" to do but don't like to do. In this culture, which has attached such overwhelming importance to work and production, the job—the earning of a

living—probably has been the principal social context in which such habits have been inculcated. The work role is the one that males of the culture have had to play for keeps and in which they have had to come to terms with difficulties and adversities. Work situations, of course, can contain many nonphysical kinds of adversity. But the physical ones have been the most elemental and, in the past, pervasive. As they are subtracted, and as total working time per man declines, one wonders whether the community may not be losing a familiarity with manageable personal hardships which in the past has strengthened its resiliency.

But I should leave such speculation to others more competent. One does not have to range too far beyond the borders of economics to spot some other implications of continuing mechanization for the organization of production. A perpetuation of the differential rate of productivity growth between manufacturing and nonmanufacturing industries could cause a substantial shift in the structure of the economy and possibly of political power in the United States.

During the past half century, productivity gains in manufacturing appear to have been substantially greater than those elsewhere in the economy. There is no particular reason to believe that this pattern will not persist. If it should, in 20 or 30 years a relatively few highly progressive fabricating and processing industries plus a few networks of energy suppliers will be the wellsprings of economic abundance in the United States. The plants themselves may be more or less numerous and more or less geographically dispersed than now, depending partly on our success in developing low-cost, modest-sized nuclear energy generation. But in any case most of them probably will be divisions of a relatively few large corporate establishments.

The need to tap large pools of labor will be a less important factor than now in determining industrial location. For by current standards most of these will be very lightly populated plants. Their labor requirements will be more like that of the present electrical power and oil refinery industries. In many fabricating processes most workers will have been replaced by machines, and most foremen by feedback controls and computers. Much the same will apply to office staffs. Only the shop supervisors, some maintenance personnel and technicians, and middle and upper managers will still be human. Most of the rest of us who are not retired or prolonging our education will be employed servicing or distributing goods to each other in response to the opulent wants we all will have, thanks to the twin circumstances of high real incomes and much leisure—both of which, in turn, will be due largely to these mechanized industrial cornucopias.

Specialists on automation quite rightly emphasize that the speed and pervasiveness of the trend toward this kind of thing can easily be exaggerated and romanticized. Nonetheless the trend itself is quite apparent. It suggests the possibility of a long-term decline in the power of organized labor in the United States, inasmuch as labor's stronghold during the past few decades has been the fabricating and processing industries and, within those industries, the manual, nonprofessional, and nonclerical occupations. With the size of the manufacturing labor force declining, in relative if not absolute terms, either there will be an erosion of union power or the unions will have to achieve new effectiveness in organizing technical and professional personnel and workers in distribution and the services. The effectiveness of unions in winning traditional wage and working conditions benefits for their shrinking numbers in manufacturing might not be impaired. But their long-term role as an offsetting counterpoise to the discretionary authority of large corporate management would seem to be threatened.[4]

This may complicate the long-term problem of productivity gains distribution.[5] Also, if it comes to pass, it will accentuate the exposed position into which management is being thrust in an economy dominated by large producer groups. There may be an increasing

[4] See this issue's *Consultation* for a much more extended exploration of this question.

[5] This point is developed in the references cited in footnote 3.

scope of discretionary managerial authority not closely disciplined by the market. At the same time, the labor "countervailant" to such authority may be weakening. This could lead to mounting public uneasiness about whether or not the community has sufficiently reliable mechanisms for assuring that private economic power be exercised in a socially responsible manner. At the moment it is not fashionable in the United States to discuss this issue other than obliquely. But the whole question of whether private institutions and public policies can be adjusted to improve the social accountability of those wielding concentrated economic power without dampening the productiveness and progressiveness of the system may well, it seems to me, become the fundamental domestic political-economic problem of the next generation. If so, further mechanization and dehumanization of fabricating, processing, and assembly operations will have helped to pose the problem.

Leisure and Values

A few years ago George Soule wrote a fascinating book, called *Time for Living,* whose thesis was that within a few decades Americans will not need to spend nearly so much of their time earning their livings and will have more time for "living" itself.[6] An increasing preference for taking new productivity gains in the form of additional leisure rather than as additional goods and services, Soule reasoned, will permit a vast and varied flowering of culture in the United States that will be as fine qualitatively as anything the world has seen and will be quantitatively wholly unprecedented. Our situation will be rather like that of ancient Athens: a superstructure of superb artistic, intellectual, and recreational activity supported by a slave economy—except that this time all the slaves will be machines, and the privilege of leisure will extend to the whole mass of the population. In the last analysis, argued Soule, it will be the brilliance of American society's material achievements that will free it from the charge of excessive materialism.

This is a very pretty picture, and it may be realistic. On the other hand, cynics insist that an accelerated growth of mass leisure and therefore of mass leisure markets can mean only a spreading tyranny of the mediocre and the gross—a further displacement of reading by television, of "worth-while" TV by adult westerns and quiz shows, of individual sport by athletic spectacles, of ballet and classical jazz by rock 'n' roll, of chamber music by pops concerts, of rigorous academic disciplines by how-to-do-it courses and group adjustment workshops, of family life by "togetherness," travel by tourism, diversity by conformity, and of the Good Society by the Lonely Crowd.

These are some more issues that we cannot pursue here. But this much it is well for any analyst of long-run U.S. economic prospects to recognize: Successful digestion of large increments of leisure in the next few decades will require some reweighting of conventional values in the United States. If this country, wholly untroubled by affairs beyond its borders, could follow its own internal inclinations, the rate of physical economic growth might very well slow down during the next generation. Such a development would not need to indicate any social decadence or stagnation; there would be nothing necessarily sad or regrettable about it, provided the community could find new dimensions in which to strive and achieve. But this would necessitate some reordering of values. For in the culture to date, individual success and prestige have been very largely governed by how one has played his occupational role. If occupational roles in the future are to claim a much smaller portion of adult time, Americans, to stay healthy, will have to find greater rewarding challenges in other adult roles—as amateur artists, artisans, politicians, churchmen, sportsmen, students, conversationalists, child psychologists, or what have you. And for such challenges to be adequate, greater social prestige will have to be accorded to performance in these nonremunerative pursuits.

Slave labor may have been a necessary, but

[6] George H. Soule, *Time for Living* (New York: The Viking Press, Inc., 1955).

it was not a sufficient condition for growing Athenian culture. It was also essential that the community's scale of values attach great importance to nonmaterial achievements. One would no more have cited the Athenian GNP as an adequate index of whether the city-state had had a good or bad year than he would today accept the Harvard football team's cumulative point spread as a fair indication of that university's annual accomplishment.

Economic or occupational achievement in the United States will not have to be deemphasized as much as Harvard football to make a major increase in leisure socially digestible. But economically nonproductive performance may have to be taken much more seriously. It may not be unhealthy for young men who envisage themselves as the steel masters or helicopter magnates of 1990 to ponder the possibility that most bosses of automated commodity production in 1990 will be like the water commissioners of 1950, and that their fame may depend chiefly on the skill with which they have selected and practice their avocations.

BUT—THE WORLD AROUND US

These are rather bizarre subjects that we have just been discussing. The question of whether or not a populace can become an opulent leisure class without getting soft, bored, and decadent is one with which many aristocracies but few whole societies have had to wrestle in the past. Actually the question may be a little premature even for the United States. At least this is my impression when I consider influences lying beyond the borders of the American economy itself. In the turbulent world around us there will be no lack of urgent economic challenges for the next generation of Americans. And while some of these external problems have been generated or aggravated by the very productiveness of the American economy, that same productiveness constitutes our most promising national resource for meeting them.

The question that holds the key to the American economy's future is not how to become increasingly idle without becoming increasingly lazy. It is the simple question of survival. Or, more specifically: Can the nation marshal its productive potential to facilitate adjustments abroad that can achieve security for what is presently the most privileged and envied society in a revolutionary world?

The Soviet-Western Duel

There is, first of all, of course, the fact of a stark, dangerously polarized ideological contest between two vast international systems led by the United States and the Soviet Union. This is a rare, extraordinarily explosive situation. There was nothing like it during most of the nineteenth century in which the American economy embarked on its great developmental surge. The contest is one of many dimensions, committed to many arenas. Inevitably it permeates the world's affairs. It casts them in an unusually garish light, because this is one of the few times in history, if not quite the first, when two armed camps have amassed such destructive power that a struggle between them threatens to wipe out civilization. For quite the first time, the extinction of all human life is a possibility.

The most obvious, shorter-run implication for the American economy is the necessity of maintaining whatever degree of military strength—including weapons improvement and underlying scientific development, accommodation of allies, and preparedness to fight small "limited" wars (to avoid being nibbled up as well as blown up)—needed to keep "the stalemate of mutual terror" a stalemate. Recently Soviet technical achievements have shocked Americans into a realization that they probably have undergauged the costs of these military requirements. (It is somewhat ironic, when one considers the need that a secure, insulated American society would have for developing new cultural values and challenges, that it also was these new demonstrations of the Soviet threat that aroused effective dissatisfaction with the quality of American education.) It now appears that the post-Korean

War hope that a reduced, then stabilized absolute level of defense outlays would permit the maintenance of a safe degree of strength relative to the communist powers was dangerously optimistic.

But this is only the beginning of the strategic problem or of its domestic economic implications. A military stalemate, no matter how assiduously tended, is inherently risky and unstable. If it works, it does not even provide a satisfactory form of competition; the contestants are forestalled by self-interest from joining the issue for which they accumulate the wherewithal to contest by military means. In the long run, therefore, other avenues to national survival must be found, and these seem to be of two general sorts.

One possibility is a direct lessening of the tensions between the principal parties—a move in the direction of mutually civil, tolerant, and humane, if not cordial, coexistence. In the long run some such mutual accommodation, through the processes of cultural and commercial intercourse, must provide part of the alternative to mutual destruction. If so, an increasing interpenetration of Western and communist societies may have important consequences for American business, particularly with respect to operations and trade overseas and the specialization of domestic production.

However, this may be a long way off. During the coming generation it would be foolhardy to expect the spread of brotherly forbearance to do much of the job of resolving the Soviet-Western conflict. Rather, we must rely principally on another more immediately accessible route to survival—that of transferring the contest to forms of competition less hazardous than the military. This is where some of the chief economic implications of the strategic situation appear, for such a transfer already is well under way, and the emerging forms of nonmilitary competition are heavily economic.

The simplest of these varieties of economic rivalry is the battle of direct performance comparisons between the United States and the Soviet Union. On the one hand, there is the faster rate of growth that the Soviet Union, at an earlier developmental stage, has been achieving by means of exceptionally intensive capital formation made possible by authoritarian belt-tightening. On the other hand, there is still the great absolute superiority of U.S. output, the greater superiority of American output and leisure per capita, and the even greater superiority in consumption per capita. The display significance that such comparisons have and will continue to have, both within the competing economies and in the eyes of onlooking nations, should not be underrated.

In addition, there is a competition between the chief protagonists of the struggle to win trading partners among those nations occupying the continental European hinterland between East and extreme West—this as a means of cementing the economic cohesiveness of one's own bloc and weakening that of the other's. For the United States during the decades ahead, this may mean expanding opportunities for American business operations in Europe, but it also may require radical and painful adjustments in U.S. tariffs and other commercial policies.

These dimensions of the Soviet-Western struggle certainly would deserve careful treatment in any extended discussion of the international uncertainties in the long-term American outlook. However, there is still another, and surely more crucial, arena of economic competition—that of the economically underdeveloped countries.

World Economic Revolution

There is a second basic fact threatening the security of the American economy during the coming generation: the insistent, surging demand for material improvement that has burst forth among the economically poorer peoples of the planet during the past couple of decades. Even if Americans and Russians were the warmest of allies, this situation would inject grave uncertainties into long-term U.S. prospects. For the United States is the supreme "have" in a world of awakening "have-nots." Americans, who constitute some 6 per cent of the world's population, probably enjoy over

half the world's real income. The security of any person or group who occupies such a favored position relative to his fellows is tentative and dubious. This is especially true when the welfare differential, instead of narrowing, is widening, as it has appeared to be doing in recent years. Not only is output per capita vastly higher in the United States; the rate of productivity improvement here has been outstripping that in most of the underdeveloped areas.

Now it is quite true that numerical income comparisons may both exaggerate and oversimplify the problem. For one thing, the available output and income data for many countries still are extremely crude and unreliable. Moreover, even if the figures were technically impeccable, it would be misleading to suppose that the average resident of the United States, where national income per capita is about $2,000 a year, is more than twenty times "better off" than, say, the average Indonesian whose measurable income may be less than $100 a year. But this is only a matter of degree, of shading. The essential point remains. However you estimate it, the material welfare differential between the advanced Western economies—particularly that of the United States—and most of the economies of Asia, Africa, and Latin America is tremendous. And further: The latent unrest that this kind of situation has promised for a century or more is no longer just latent. It has become violently kinetic since World War II.

This is not to say that throughout the poorer two-thirds of the world the masses of Vietnamese peasants, northern Nigerian natives, Egyptian fellahin, and Peruvian Indians all suddenly have cast aside centuries-old patterns and values and are consciously pressing forward at this moment in search of greater industrialization and higher per capita real incomes. The underdeveloped countries differ radically in their present stages of economic development, in their social and political readiness for further development, and in the pervasiveness with which the appetite for development has infected the populace. But this much of a generalization is safe: In virtually every Asian, African, and Latin American country a critical, socially controlling leadership has been indelibly infected with the demand for development. Almost without exception, these countries already are irreversibly committed to an adventure in rapid, disruptive, but ambitious social change. Wide mass awareness, if it does not already exist, is only a matter of time. The question is less whether accelerated economic development is in the offing than what form it will take. All of this is a result of a confluence in the mid-twentieth century of some or all of the following forces. (For those Westerners who rather deplore such turmoil and wish that an orderly colonial status quo had lasted at least a little longer, the following list is not without its irony. For almost all of these forces, you will note, can be marked down as Western infections.)

First, there is the drive of nationalism, the demand for political independence, heavily inspired by Western and especially American history and political ideals. And this itself, of course, is a reaction against Western colonialism.

Second, thanks to colonialism, increasing trade with the West, and a greatly increased interchange of persons with the advanced Western countries for educational, governmental, military, and business reasons, there is a snowballing awareness of and appetite for Western living standards. Related, but distinguishable, there is a spreading knowledge of Western technology and a belief in its transplantability.

Third, in many of the less developed economies, a surging growth in population has been set in motion by the introduction of Western health techniques.

Fourth, in many of the Asian countries during the past two decades the economy's capital stock has badly deteriorated as the result of war or political upheaval. In some instances a redrawing of political boundaries has disrupted established trading and production patterns. In such cases intensified developmental efforts are needed, not just to improve economic welfare, but to recover previous levels.

Finally, a number of the Asian countries have decided, partly under Western and particularly American encouragement, to assume considerably larger national defense burdens, mostly to protect themselves against communism. Even with heavy U.S. military assistance, these undertakings make significant claims on local resources.

This is no place to attempt any comprehensive outline of all of the factors that may be needed to achieve the kind of economic expansion for which these forces create an urgent demand. Two requirements, however, are (1) a heavy import and propagation of technological knowledge and skills (adapted to local resource availabilities), and (2) capital formation. The former is vitally important and certainly not easy. Nevertheless, the export of technical assistance from advanced economies is not in itself really a highly expensive operation. Moreover, as we should have learned well from the Russians by now, Western technology basically seems to be highly transferable among very different cultures. Thus it is typically the lack of capital, not of technology, that is the most stubborn, intransigent economic bottleneck impeding the developmental process. It is the more expensive bottleneck to break, and poverty limits the ability of the underdeveloped economies to attack it. It is hard for a subsistence economy to channel much of its output into nonconsumption uses.

Competition in Underdeveloped Areas

Here the Soviet-Western contest reappears. Most of the underdeveloped countries, in order to achieve anything like the rate of economic growth they urgently want, must rely either on the United States and its economically advanced allies or on the Soviet Union, not only for technical assistance but for the means to form capital rapidly. There are similarities but also vital differences between what the two contestants have to offer. Both provide technical assistance, although they differ in their procedures for supplying it. Both also have been exporting some capital to the underdeveloped countries. However, they differ in the basic solutions that they offer to the capital shortage problem. Primarily, communism offers a technique for rapid indigenous capital formation, even in an impoverished economy, by dint of ruthless, authoritarian belt-tightening. This is an illiberal, inhumane procedure that we neither can nor would match in kind. Most of the revolutionary leaders of the new nations also find the procedure distasteful, but less abhorrent than we do. And they think they see in the history of the Soviet Union a remarkable demonstration of the material effectiveness of the procedure.

If the West wants to preserve for the uncommitted underdeveloped countries the opportunity to build reasonably liberal institutions not incompatible with our own, it presumably must furnish a partial substitute for the margin of "agony capital" which a communist system could extract from the hides of the Asian and African masses, a substitute in the form of larger capital exports than the Communists would supply.

This, I must emphasize, is not the whole of the problem. Capital, to be useful, must be packaged together with skills and internal reforms; it must be sensibly combined with local resources into a coherent developmental program. Nor will the adequacy of the West's capital supply to the less developed economies be only a matter of size. Any capital export program can be wrecked by inept diplomacy and administration, by failure to evolve a workable partnership between public and private sources of Western capital, or by incompatible foreign trade policies. But in the present context, where our primary concern is the domestic economic outlook in the United States, it is legitimate to emphasize the capital requirement as that aspect of the economic revolution now in progress overseas which is likely to exert the heaviest demand on American resources.

Obviously, the United States has a vital selfish interest in facilitating acceptable alternatives to the communist program of economic development in Asia, Africa, and Latin America. There is self-interest of the most direct

commercial sort in maintaining and improving American access to foreign sources of raw materials during a generation in which world material supplies promise to become much scarcer. In a broader, more fundamental sense, Americans, as the world's most economically privileged minority group, have the liveliest possible interest in not becoming increasingly surrounded by an actively hostile political-economic system. To lose—and probably also to win—a hydrogen war would be nationally fatal. But to lose the Soviet-Western contest now waxing in the underdeveloped areas of the world could, in the long run, be equally deadly.

There is no sense ignoring the fact that the United States must surmount certain substantial handicaps in this contest. It bears the stigma of richness. It is economically and historically remote from the human problems that preoccupy the less developed economies. Many of the latter's leaders are inclined to feel that the recent experience of the Soviet Union is much more relevant to their situations. Throughout much of Asia this rather vague handicap is dangerously compounded by the wide acceptance, even among non-Communist intellectuals, of the Marxist theory of imperialism, according to which any export of capital from an advanced economy—even giveaway government capital—is only a tactic of colonial exploitation.

The United States obviously suffers in Afro-Asian eyes by its association with the West European "colonial powers." Moreover, Americans have become widely stereotyped as dogmatic capitalists, inflexibly opposed to the forms of public enterprise that local tastes and circumstances require in many of the less-developed areas. By the same token, the image of the United States as a champion of democracy and human rights has been allowed to dim. Indeed, the association of democracy and socialism is so strong in South Asia that the claim of the communist powers to be the true democracies of the world is not always recognized as the fatuous nonsense that it is. Finally, so far as American handicaps are concerned, the manner in which the United States has administered its foreign assistance programs is not, in many instances, widely admired.

But all of these are only obstacles, not roadblocks, to effective public and private American efforts to guide world economic development into channels that do not threaten Western survival. There is nothing insurmountable about such obstacles unless, indeed, those pessimists who suggest that the opulent U.S. economy is losing its talent for rising to new challenges should be correct. If the need is there and if Americans are sufficiently perceptive to appreciate it, the productive resources that we can devote to the task of capital and technological export during the next generation far outclass those of any competitor, including the Soviet Union. The ideological and administrative dimensions of the contest, and the question of whether democratic political processes within the United States will yield as decisive and imaginative action as the challenge invites, will all be closer issues. But any careful student of American history should be permitted some optimism on these counts as well.

HUMAN annals may make dismal reading, but their fascination remains. And in the end, say what you will, the pageant of human life has for the observer a great, if gloomy, magnificence. With no friends save his own indomitable spirit, man has made his way through the long centuries. Distressed, defeated, deceived, he continues to undertake his forlorn hopes and pursue his fantastic loyalties. Who would abate, wherever they lead, his resolution, his willingness to dare the wrath whether of gods or man, his refusal to count the cost?

—*W. Macneile Dixon*
THE HUMAN SITUATION

Government Expansion

why and how much?

HERBERT V. PROCHNOW

FROM THE TIME of Aristotle and Plato, thoughtful men have earnestly debated the role of government in a nation's economic life. That question is also one of the issues upon which the judgment of our people is being increasingly focused. Unfortunately, on this problem we sometimes think with our emotions and not with our minds. In discussing the relationship of government to business, it is easy to utter empty platitudes with aggravating solemnity. However, to paraphrase John Stuart Mill, a question of such importance should not be left to be fought out between ignorant change and ignorant opposition to change.

There has never been a time in American history when government has not participated in our economic life, but the role of government has changed over the years.

The relationship of the federal government to business has had three principal phases. In the period up to 1860, the major task of the government was to produce goods and services, such as the post office, the mint, and the courts. From 1860 to 1940, the federal government functioned more and more as a regulator of business. Finally, in the period since 1940, the government has grown to be the most important single customer of business, and thereby is a dominant factor in determining business conditions.

GOVERNMENT'S ROLE TO 1860

In the first period, after the adoption of the Constitution, the government granted limited patent monopolies to stimulate invention and

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develop industry. The Tariff of 1789 was passed to encourage and protect manufacturing. Trade embargoes were used as instruments of foreign policy. Congress twice organized United States banks to carry on commercial operations. Many states built and managed canals. Maryland and Virginia, for example, gave money to the Potomac Company to improve navigation, and George Washington managed the company until he became President. Both federal and state governments subsidized railroad construction, and Indiana even gave railroads the power to issue paper money to pay for labor and materials.

In 1790, the principal functions of the federal government included foreign affairs, national defense, law enforcement, tax collection, tariff administration, the postal service, the mint, banking regulation, patents, land grants, veterans' pensions, and Indian affairs. Total expenditures of the federal government in that year were only $1.4 million. By 1860 they were $63 million.

GOVERNMENT FROM 1860 TO 1940

After 1860, the government sought to promote industrial development by increasing the protective tariff, encouraging the growth of railroads by land grants, establishing a national banking system, and pursuing policies favorable to industry. Investment in business mounted rapidly. By 1880, the value of manufactured products and the capital invested in manufacturing industries had increased to over five times the level of 1850—only 30 years earlier. The increases were greatest in the railroad field and in heavy industry located in densely populated areas. These industries needed huge investment, and they were particularly susceptible to the concentration of ownership and control.

The major reason for the strong laissez faire policy almost up to 1900 is to be found in the social and economic environment in which this nation was established and grew. Many of the early colonists were ambitious, liberty-loving, energetic persons who came here determined to improve their individual welfare. Rich land, combined with an industrial revolution, gave them the opportunity, and they asked only to be left alone to use this opportunity fully. Most of them lived on farms. In 1860, agriculture was by far the leading industry in the country. The isolation of the rural community raised few of the difficult problems that came later with the growth of congested and industrialized urban areas. But by 1900, 60 per cent of all workers were in nonagricultural pursuits, and the economy was facing the new problems of industrialization.

Between 1860 and 1940, there was a noticeable swing away from the individualistic attitude of the preceding period. Farmers, small businessmen, and labor were critical of economic conditions. Tremendous immigration had absorbed great areas of our public lands. The opportunity for self-support on the western frontier was vanishing. Increasing industrialization brought urban congestion, labor unrest, and a growing sense of economic insecurity. Recurring depressions and a restless business cycle were disturbing factors as industrial corporations made gigantic strides in their growth. These problems gave rise to an increasing sense that government should have greater responsibility for the conduct of economic affairs and the economic security of the people.

The government took its first steps to regulate large segments of business with the passage of the Interstate Commerce Act in 1887, followed by the Sherman Antitrust Act in 1890.

Shortly thereafter, Theodore Roosevelt with his "Square Deal" and Woodrow Wilson with his "New Freedom" increased federal regulation in many fields. This was the first important period of growth in legislation designed to regulate business.

New legislation affected labor, food processing, trade practices, power, and farm credit. The government also revised the nation's banking institutions in 1913, strengthened its antitrust legislation in 1914, and came to take a leading interest in the preservation of natural resources. With the country's entry into World

War I, government control of business exceeded anything the country had ever thought possible.

During the boom of the 1920's, the watchwords of business were "Back to Normalcy" and "Less Government in Business." Government emergency war controls were largely removed. Business attained record levels. However, farm income was squeezed by declining farm prices and rising costs. To aid the farmers, the federal government enacted the Packers' and Stockyards Act of 1921; the Capper-Volstead Act of 1922; the Agricultural Credit Act of 1923; the Cooperative Marketing Act of 1926; and the Agricultural Marketing Act, which established the Farm Board, in 1929. In only a few years, we had come a long way from President Cleveland's veto of an appropriation of a mere $25,000 to buy seed corn for Texas farmers ruined by a drought. But despite the slogan of "Less Government in Business," the forces favoring an expanded role for government were growing stronger and stronger. [1]

Then came the collapse of the stock market boom in 1929, and gradually the lengthening shadow of a deep depression settled over the nation. The towering structure of prosperity had cracked wide open.

By 1932, industrial production had declined 50 per cent; wholesale prices 33⅓ per cent; stock prices 75 per cent; and the value of the nation's total output of goods and services, 44 per cent. Only unemployment and business failures rose. Conservative men were in despair over $7, $8, and $9 billion federal budgets. The pillars of the economic firmament were falling, and an older order of things was being shaken down about our ears. Those were anxious times for anxious souls. The stability of the economy became the major concern of government. The Reconstruction Finance Corporation, the Federal Farm Board, public works projects, and emergency relief programs followed rapidly. Franklin Roosevelt vastly extended these measures, and we experienced the second most important period of growth of government regulatory powers in our history.

The regulatory program of the 1930's was designed to achieve two goals: recovery and reform. The recovery phase included the widening of the activities of the Reconstruction Finance Corporation, the establishment of the PWA and the WPA, and the use of public credit to prevent farm and home foreclosures. The reform program included the establishment of the National Labor Relations Board, the Walsh-Healy Act, the Fair Labor Standards Act, the Agricultural Adjustment Act of 1938, The Securities Act of 1933, the Robinson-Patman Act, the Miller-Tydings Resale Price Maintenance Law, and the Food, Drug and Cosmetic Act of 1938. The banking laws of the nation were revised in major respects.

From 1896 to 1939, inclusive, the federal government established approximately 100 new agencies, including such major agencies as the Bureau of the Budget, Federal Bureau of Investigation, Rural Electrification Administration, Federal Trade Commission, Federal Power Commission, Commodity Credit Corporation, Export-Import Bank, Federal Housing Administration, Federal Deposit Insurance Corporation, Securities and Exchange Commission, Veterans' Administration, Social Security Administration, Tennessee Valley Authority, and the Board of Governors of the Federal Reserve System. With the great increase in the number of new agencies, there was also an expansion in the older agencies.

By the end of the 1930's, the federal government had achieved significant control over business and was about to enter into a new relationship, that of being its chief customer.

[1] Cleveland stated at that time, "I can find no warrant for such an appropriation in the Constitution, and I do not believe that the power and duty of the general government ought to be extended to the relief of individual suffering which is in no manner properly related to the public service or benefit. A prevalent tendency to disregard the limited mission of this power and duty should, I think, be steadfastly resisted, to the end that the lesson should be constantly enforced that, though the people support the government, the government should not support the people." Grover Cleveland, "Some Notable Vetoes," *The Writings and Speeches of Grover Cleveland* (New York: Cassell Publishing Company, 1892), p. 450.

GOVERNMENT SINCE 1940

With the coming of the 1940's and America's entry into World War II, the federal government's purchase of goods and services attained levels undreamed of in earlier years. Government purchases of $89 billion in 1944 almost equalled the value of the total output of goods and services of the entire nation for 1930 and were only slightly less than the value of the nation's total output for the boom year of 1929. More importantly, in 1958, the federal government's purchases will account for an estimated 17 per cent of the nation's total output as compared with 1.2 per cent in 1929, and an average of only 3.8 per cent for the years 1929 through 1939. The federal government has become the chief customer of business, and its decisions concerning revenues and expenditures have come to have determining and far-reaching effects on the level of economic activity for the country as a whole.

Following World War II, the Congress passed the Employment Act of 1946, which declared, with some qualifications, that it is the responsibility of the federal government to promote maximum employment, production, and purchasing power. This determination by the federal government to prevent mass unemployment and to maintain economic stability grew out of the depression of the 1930's. There are vast possibilities in the Act for regulating the nation's economy. To achieve the objectives of the Act, a President may simply exhort business and labor leaders to follow certain economic policies. But it is conceivable that some Administration may institute far-reaching regulation for the economy under the Act.

Today, the operations of the federal government pervade the whole economy. For fiscal 1958, federal expenditures of approximately $72.8 billion are 140 times the expenditures of 1900. This compares with a population increase for the same period of only a little over two times.

In 1900, the total expenditures for all federal, state, and local governments amounted to only $1.5 billion, compared to $87 billion in 1957. For 1957, the total expenditures by these government units combined were responsible for $1 out of every $4 spent in the United States. There are inherent dangers in the concentration of such vast financial power.

BUSINESS-GOVERNMENT TRENDS

Having examined the successive roles government has played historically in its relationship to business, as a producer of goods, a regulator of industry, and a gigantic purchaser of goods and services, we may now ask about the probable future trends and implications of this relationship.

Private enterprise is today capable of production on such a gigantic scale that it is dependent as never before upon the economic well-being of the masses of people. The tens of millions of Americans who constitute our market must have the means and the willingness to buy the products of industry if the economy is to operate at the high level of activity that is the universally accepted objective of business, labor, and government. At this point, the economic concerns of private business, labor, and government are identical.

Mass production by efficient modern industry is capable of sending forth an endless flow of goods at low cost. Mass markets therefore become imperative. We have moved steadily away from the sedative hum of the hand spinning wheel and the village feed mill to huge gray factories silhouetted against the urban sky line. Great power-driven factories, great organizations of labor, great markets, and an interdependent economy make highly improbable any broad return of government to the Arcadian simplicity of colonial days.

As President Eisenhower has stated, "The demands of modern life and the unsettled status of the world require a more important role for government than it played in earlier and quieter times."

But this does not mean that we must now thoughtlessly turn over the management of the economy to an all-embracing state. It means that we need to repeatedly re-examine and redefine the relationship of government to

business in terms of a constantly changing and vastly expanded national economy. It means also that we need to assess the relationship of government to business in terms of a turbulent and restless international economy.

We may conclude that so long as we are engaged in the present world struggle, government will continue to be by far the largest single purchaser of the goods and services the nation produces. A budget of over $40 billion for defense automatically creates an impact of far-reaching significance upon the economy. Approximately 77 per cent of all federal expenditures are for national security. Unfortunately, there is no evidence that the American people can in the near future hope for any major decline in these expenditures. With a continuance of the present world unrest, new weapons and defense modernization will bring pressures for large defense expenditures in the years immediately ahead. However, in any attempt to reduce the role of government as a purchaser of goods and services, defense is the single most important area to examine. Because of the very magnitude of its expenditures, the defense organization should be forced constantly to justify its huge outlays and the policies that require those expenditures. We ought never to accept complacently the philosophy that the largest single expenditure of the government is beyond the most critical and searching analysis.

Closely related to this subject of defense expenditures is the much discussed mutual security program, or, as it is commonly called, our foreign military and economic aid. A large part of the foreign aid program is actually an extension of the defense budget, and a relatively small part has represented foreign economic aid. If foreign military aid is to include the newest weapons and the most modern equipment, the cost will probably decline very little, if any, in the years immediately ahead.

An analysis of the foreign aid program reveals that a large percentage of the funds is spent in only a few countries and largely for military purposes and defense support. It has been suggested that the foreign military aid budget should be included in the defense budget. Regardless of the merits of the suggestion, it does not reduce total expenditures. It merely shifts the expenditures from one government agency to another. There is little prospect of any large reduction in foreign military and economic aid in the years immediately ahead.

Our farm surplus disposal program is another form of foreign aid involving billions of dollars. The relationship of the government to agriculture is perhaps closer and more involved than with any other great industry. The American people through Congress have approved a price support program for certain farm products. Under this program, the government acquires billions of dollars worth of surplus farm products. Government representatives have disposed of huge quantities of these surplus farm products to foreign nations, in many cases accepting soft foreign currencies in payment. A substantial part of these foreign currencies is, in turn, loaned to the foreign governments for economic development and is to be repaid over a long period of years.

There are a number of instances where farm surpluses have been used constructively as an instrument of our foreign policy. However, some nations that are competitive suppliers of farm products to the world have been less than enthusiastic about our farm surplus disposal program. [2]

Regardless of the merits of the policy, it seems clear that we do not engage in a domestic farm price support program primarily for the purpose of giving foreign aid. We engage in it essentially for domestic reasons, and foreign aid provides one outlet for the surpluses that accumulate. There is little evidence that the American people through Congress will reduce the role of government in the agricultural industry to any significant extent in the near future.

The item of veterans' expenditures is but another area where costs tend to be rigid or to rise.

[2] See Paul P. Kennedy, "Dr. Eisenhower Hears Criticism," *New York Times*, July 23, 1958, p. 13.

The government has now become a highly important factor in most of the nation's major economic decisions—whether they involve business, agriculture, or labor. Furthermore, there is a seemingly widespread expectation that government should assume this role.

If a strike threatens to tie up a great industry for weeks, the government is expected to prevent it. If the dock workers strike and close a large port, we turn to government for relief. If housing construction declines, the government is expected to arrange easier credit, lower down payments, and provide other remedies. If we seek slum clearance, we ask the government to provide a large part of the funds required. If some distributors of products extend exceptionally easy installment terms, other distributors believe government should correct these trade practices and tighten terms by installment regulations. If metal prices fall, there are insistent demands for larger government stockpiles, regardless of whether present stockpiles are considered adequate for the national defense. If the price of an agricultural product falls, there are demands that the price be supported even though large stockpiles result. If drought burns up some farm lands, we expect the government to deal with the problem. If we are engaged in small business, we want government to establish agencies to help us with our particular problems. If we feel the competition of a foreign product, we believe government should relieve the effects of such competition by tariffs or quotas.

We ask government to provide security for tens of millions of us in old age. We ask government to determine the number of hours we work, our minimum wages, and our unemployment compensation. We ask government for a vast expansion of our highway system. We seek larger contributions from government to improve our particular harbor or river.

Some of these requests are desirable functions of government. Others clearly are not. We contribute our time and money to an infinite number of organizations, which devote a part of their energies to getting something from the government. In countless areas we now turn to government where we did not do so a generation ago. Government grows bigger and bigger, but, to quote Shakespeare,

> "The fault, dear Brutus, is not in our stars,
> But in ourselves."

With one hand we work to reduce the role of government in our economic life. With the other hand we work even harder to increase it. We ask for a reduction in government expenditures, but not where it would affect our industry. We demand that government expenses be cut, but not for the federal projects in our own communities. On one day we write our congressman to reduce government expenses and our taxes. The next day we write urging him to bring home the federal bacon to our communities.

An illuminating illustration of the increase in local government services is provided by a study of the city of Detroit. From 1824 to 1930 the number of services Detroit provided its citizens increased from 24 to over 300. The chronology of the introduction of a few of the 300 services and their changing character is revealing. [3]

1835	Street paving
1836	Sewerage
1850	Street lighting
1858	High school
1865	Library and organized police patrol
1887	Milk inspection
1888	Garbage collection
1890	Zoo
1892	Free textbooks
1894	Bathing beaches
1898	Band concerts
1899	Classes for the deaf
1904	Playgrounds
1909	Traffic control
1912	Classes for the anemic and blind
1914	Old age support
1917	Junior college and recreation camps
1920	Medical college
1921	Music, drama, and fine arts libraries
1922	Golf courses
1925	Symphony concerts
1927	Law college

This condensed outline of the growth of government services rendered by a metropolitan community indicates how our demands for government services have expanded.

[3] Leverett Samuel Lyon and Victor Abramson, *Government and Economic Life,* Vol. II (Washington: The Brookings Institution, 1940), 1104-6.

Will the role of government continue to expand as it has since the founding of the republic? A few questions may indicate the probable trends.

Will scientific progress and mechanization cease, or will they continue with far-reaching effects on industry, sources of raw materials, and hours of employment, so that these interests will seek government assistance? Will unusual new products and services adversely affect some major industries as they have in the past, and will these groups seek government help? Will the adjustments that have been under way for a number of years in agriculture continue with a continuing demand by the industry for price support programs?

Will the social security program contract, stand still, or expand? Will the continual drain on our national resources lead to more legislation for conservation?

Will rising incomes of the people lead them to demand more schools, hospital, medical, and recreational facilities as they have in the past? Will the development of atomic energy for peacetime purposes lead to the establishment of agencies for its regulation and inspection? Will vastly increased highway and transportation requirements in the next ten years lead to further expenditures by government?

One could continue these questions, but the probable role of government in the years ahead seems apparent.

Government is charged with the guardianship of the common good. You and I can make a significant contribution to that objective and to the proper role of government in three ways:

First You and I can become better informed regarding the difficult problems of government. Constructive suggestions for reducing government expenditures and eliminating waste do not come from superficial knowledge. They come from hard, sustained study.

Second You and I can refuse to join pressure groups that demand increasing government activity and expenditures that expand the role of government.

Third You and I can become active participants in local, state, and national governments. To solve the problems of government we need more thinkers and fewer cheer leaders pleading the causes of pressure groups.

In an age of science and technology, modern industry with its massive, power-driven equipment, and with its genius for producing an endless flow of goods, is destined to become the great instrument for the social and economic enrichment of man.

A machine civilization with its capacity to vastly multiply production will help to assure the economic independence of man, augment his leisure, and affirm his dignity. Among the greatest social changes of our times are those being made by far-sighted business leadership in the creation of wealth for the masses of people and in the substantial enlargement of the middle classes. Mass-conscious capitalism —a peoples' capitalism—is accomplishing what mass-conscious communism can only dream about.

Unless we have muddling and mismanagement, the machine and increasing automation in the years immediately ahead may become the most effective means man has ever created for attaining his economic liberation and freedom from insecurity. The functions and services of government seem destined to expand, but the role of government relative to that of business may decline as American business increasingly achieves the humanistic ends of a machine civilization.

Norman O. Miller

Are Growth Stocks Really Profitable?

Research has shown very little basis for the "growth industry = good stocks" theory of selection.

For some years now the fashion in Wall Street has been to invest in "growth stocks." Amateur investors with relatively small sums to commit in securities have been seeking industriously to pick those particular common stocks that will experience unusual growth in market value and in size of dividend payments over a period of years. Professional security analysts have struggled valiantly with the problem of identifying and selecting stocks with unusual appreciation prospects.

One of the most popular rules for selection of growth stocks is that they are usually to be found in growth industries. Concepts of growth industries vary somewhat, but they are commonly defined as those increasing their sales at a greater rate than the rate of growth of the total economy. The theory is that a company in a growth industry is likely to experience a greater-than-average increase in sales, which is likely to result in a pronounced improvement in profitability, an increase in earnings and dividends per share, and appreciation in market price for common stock.

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Research recently completed at Indiana University shows there is very little basis in the experience of the past 20 years for the growth industry idea and that, in fact, industry growth is a poor basis for selection of growth stocks. A survey of nine leading industries revealed that the greatest improvement in profitability in the period 1935-54 occurred in an industry that has expanded at about the same rate as the national economy, namely, the steel industry. The third greatest improvement in profitability was found in copper metals and mining, an industry that has been declining relative to the national economy. One of the industries with the strongest growth trends, the chemical industry, ranked seventh among the nine industries in rate of

increase in profitability. This study shows that, even if one had been able to forecast accurately in the 1930's the future growth of our major industries, the forecast would not have provided a reliable basis for selection of common stocks.

GROWTH AND PROFITABILITY

One of the difficulties of the "growth industry" idea is the loose use of the term. Many people who use it do not define it, and many others seem to regard any industry that shows an increase in sales over a period of years as a growth industry. In the expanding economy of the United States, growth is a relative term. An industry is a growth industry only if it is growing relative to the total economy. An industry that is increasing its sales in absolute dollar amounts, but at a lesser rate than the expansion of the total economy, is actually a relatively declining industry.

In this statistical study we have measured the absolute growth in nine major manufacturing and mining industries by constructing for each industry an annual index of sales (average annual sales for 1935-39 = 100). To measure the growth of the economy in terms of sales of the manufacturing and mining companies we took the aggregate annual sales of 143 companies in 18 different industries and made an index for aggregate sales (1935-39 = 100). The sales index for each of the nine industries was then divided by the aggregate sales index for the 18 industries to obtain a *relative* sales index for each industry, which shows the growth of an industry in relation to the growth of industrial companies in general. An industry experiencing a more rapid expansion of sales than industrial companies generally has a sales index rising above 100, while one experiencing a less rapid expansion of sales than industrial companies generally declines below 100.

By this method three of the nine industries studied were identified as growth industries, four as neutral industries, and two as declining industries (Table 1).

TABLE 1

Classification of Industries by Relative Growth in Sales

	Relative Sales Index, 1952-54*
Growth Industries	
Paper and paper products	149
Chemical	130
Tire and rubber	127
Neutral Industries	
Oil	104
Steel	103
Cotton textile	97
Food products	93
Declining Industries	
Copper metals and mining	79
Cigarette tobacco	76

* *Growth over the 20-year period is measured by averaging the annual relative indexes for the last three years of the period.*

SOURCE: *All of the data used in this study are derived from an investment service published by Studley, Shupert & Company, Inc., of Boston, Mass. The industry classifications used are those established by this service. The companies included in each industry are the principal companies in which there is a public investment interest.*

Relative growth in sales for an industry, according to the growth industry thesis, is supposed to cause an increase in the profitability of companies engaged in that industry. The term "profitability" is often loosely used, but we have defined it for the purpose of this study as the relationship between amount of profit and amount of total capital. Profit is the annual amount remaining after all income and expenses except fixed charges, income taxes, and preferred dividends. Total capital is the sum of noncurrent debt, preferred stock, common stock, and surplus. Thus, profitability is measured as a rate of profit on total capital, and changes in profitability appear as changes in this rate.

We have measured changes in relative profitability of the nine industries over the 20-year period by the same statistical technique as was used to measure relative growth of sales. The annual rate of profit for each industry was converted to an index with the average of 1935-39 = 100. The same kind of index was computed for the aggregate of 18 industries. Thus, an industry that has had an improvement in profitability greater than that of industrial companies generally has a relative profitability

index above 100, while an industry whose profitability has improved less shows a relative profitability index below 100.

Comparison of the relative sales indexes for the several industries with the relative profitability indexes shows very little correlation (Table 2).

There is some support for the growth industry approach to common stock selection in the fact that two of the three growth industries experienced relative growth in profitability and, in a negative way, by the fact that the industry with the least growth in sales shows the lowest relative index of profitability. Other facts, however, are quite inconsistent with the growth industry idea. The steel industry, which has expanded only at about the same rate as the total economy, had a considerably greater improvement in relative profitability than any of the growth industries. The chemical industry, with the second greatest rate of growth, had the seventh greatest rate of improvement in relative profitability; and the copper industry, which has experienced a marked relative decline in sales, had a better improvement in relative profitability than two of the three growth industries.

TABLE 2

Relative Indexes* of Industry Growth and Profitability

	Sales Index	Profit-ability Index	Order of Sales Index	Order of Profit-ability Index
Growth Industries				
Paper and paper products	149	143	1	2
Chemical	130	82	2	7
Tire and rubber	127	118	3	4
Neutral Industries				
Oil	104	101	4	6
Steel	103	179	5	1
Cotton textile	97	104	6	5
Food products	93	67	7	8
Declining Industries				
Copper metals and mining	79	121	8	3
Cigarette tobacco	76	46	9	9

* SOURCE: *Derived from data published by Studley, Shupert & Co., Boston, Mass.*

THEORY AND EXPERIENCE

There are some good reasons for thinking that a particularly favorable growth trend in an industry should result in a better-than-average improvement in profitability. A marked improvement in sales ought to permit a spreading of fixed costs over a constantly increasing volume of production and thus exert a favorable influence upon profit margins. A relatively rapidly growing industry also has the best opportunity for rapid upgrading of fixed assets, that is, of adding new plant and equipment of the latest design and efficiency. Upgrading of assets should result in cost reduction and improvement of profit margins to the extent that economies can be retained. It might be expected, too, that in the more rapidly growing industries the competitive pressures would be somewhat less because of the favorable development of markets.

Probably all of these influences upon profitability tend to operate to some extent in growth industries, but in any particular period of time their effect often tends to be diluted or offset by other influences. Thus, the effect of spreading fixed costs over greater volume may be offset over a period of time by an increase in fixed costs due to price inflation. The greater efficiency of new plant and equipment may be counterbalanced by increases in labor costs per unit of product. Even in the more rapidly growing industries, price competition may press very severely upon profit margins.

In any such statistical study as this, an important influence upon the results is the general prosperity of the economy at the beginning and the end of the period of observation. Some industries are much more sensitive profitwise to the business cycle than others, and any historical record of changes in profitability is bound to be distorted to some extent by cyclical fluctuations. We have endeavored to measure trends over a relatively long period of time—a score of years—and we have tried to minimize cyclical fluctuations by averaging annual data for the five years 1935-39 as the base period and for the three years 1952-54 as the terminal period. The fact remains that the

economy was more prosperous in 1952-54 than it was in 1935-39.

The difference in prosperity of the country during the two periods certainly had an influence upon the relative trend of profitability for the several industries in this study. In general, the more stable industries through the business cycle experienced less benefit profitwise from the higher level of business activity in 1952-54, and the more unstable industries experienced the greater profit. The steel industry led all the rest in increase in relative profitability because it was experiencing a very low rate of profit on total capital during the relatively depressed period of the late 1930's. Its profitability was greatly improved by the much more favorable business conditions of the early 1950's. The paper and paper products industry, too, was relatively depressed in the latter 1930's and booming in the early 1950's. In both industries the difference in general business conditions in the two periods probably had more to do with change in their relative profitability than did influences attributable particularly to long-term growth.

On the other hand, the cigarette tobacco industry, which makes the poorest showing of the nine industries in terms of relative profitability, is a notably stable industry. It was earning an excellent rate of profit on capital in the 1935-39 period and about the same rate in the 1952-54 period. Because the already high rate of profit did not increase, as did the rates for other industries that were depressed in the latter 1930's, the relative profitability of the tobacco industry declined. The showing of the chemical industry was also affected by its comparatively favorable profit experience in 1935-39. In spite of its distinct growth trend, the industry was not able to increase its good rate of profit as much as some other industries with less favorable profit experience in the earlier period.

It may be that differences in the general prosperity of the economy from one period to another, combined with differences in the sensitivity of profits in different industries to the condition of the economy, largely invalidate any conclusions that may be drawn from a statistical study of the growth and profit experience of industries over two decades of time. If this is so, it supports the conclusion that the long-term growth trends of industries are by no means a controlling influence upon changes in the relative profitability of industries. It suggests, instead, that even over comparatively long time periods, changes in the relative prosperity of the total economy are a major influence.

EQUITY CAPITAL PROFITABILITY

The rate of profit on total capital measures most accurately the profitability of an industry or a company. It does not, however, measure exactly changes in the profitability of common equity capital, and common stock investors are particularly interested in the returns on common stock and surplus. Between profit on total capital and profit on equity capital lie income taxes and, for many companies, interest on noncurrent debt or preferred dividends, or both. Changes in these expenses may cause changes in the profitability of equity capital different from changes in the profitability of total capital. Table 3 shows that, in fact, there have been considerable differences between the relative indexes of rate of profit on total capital and rate of profit on equity capital for the industries in this study.

The correlation between industry growth and rate of profit on equity capital is even less than that of industry growth and profitability of total capital. Of the three growth industries in this study, only the paper and paper products industry experienced a greater than average increase in rate of profit on equity capital. Its improvement ranked third among the nine industries in size of relative increase. The first and second industries in order of size of improvement were neutral industries—the oil and the steel industries. A declining industry, copper metals and mining, was the fourth industry that showed a relative increase in rate of profit on equity capital. It is worth noting that two of the growth industries ranked sixth and seventh among the nine industries in relative

TABLE 3

Profitability of Total Capital and of Equity Capital

	Relative Index Numbers*			Order of Magnitude	
Growth Industries	Sales	Total Profit	Equity Profit†	Total Profit Index	Equity Profit Index
Paper and paper products	149	143	124	2	3
Chemical	130	82	70	7	6
Tire and rubber	127	118	66	4	7
Neutral Industries					
Oil	104	101	125	6	2
Steel	103	179	261	1	1
Cotton textile	97	104	94	5	5
Food products	93	67	55	8	8
Declining Industries					
Copper metals and mining	79	121	106	3	4
Cigarette tobacco	76	46	39	9	9

* *For 1952-54 based on 1935-39 as 100.*

† *The relative indexes of rate of profit on equity capital have been computed by the same method as the relative indexes of rate of profit on total capital.*

SOURCE: *Derived from data published by Studley, Shupert & Company, Inc.*

improvement in profitability of use of equity capital.

One cause of difference between rate of profit on total capital and rate of profit on equity capital is income taxes. During the period of this study, the rates of the federal income tax increased markedly with corresponding increases in the proportion of sales absorbed by federal income tax payments. However, the increase in tax rates had no general effect on our relative indexes of rate of profit on equity capital, since the indexes for each industry were computed on an after-tax basis, as was the index for 18 industries.

The relative indexes of profit on equity capital for the different industries varied from their relative indexes of profit on total capital because of change in "leverage." (The term "leverage" is generally used to mean the proportion of the total capital structure of a company represented by senior securities, that is, bonds and preferred stock.) A successful company with senior securities in its capitalization normally "makes money" for its common stockholders by the use of this senior capital because the rate of interest on bonds, or of dividends on preferred stock, is less than the rate of profit earned by such a company on its senior capital. The excess of earnings on senior capital over its cost reverts to the equity owners of a business. Thus, for a successful company, an increase in the proportion of senior securities over a period of time causes the rate of earnings on equity capital to improve more than the improvement in rate of earnings on total capital.

Only three of the nine industries in our study increased the proportional use of senior capital from 1935-39 to 1952-54. One was a growth industry, one a neutral industry, and one a declining industry. Apparently the increase in leverage in these industries—chemical, food products, and cigarette tobacco—was influenced more by the relative cyclical stability of their earnings than by long-term growth.

Two of the three growth industries, paper and paper products and tire and rubber, greatly reduced the proportion of senior securities in their capital structures, and this development in financial policy caused a decline in their relative indexes of rate of profit on equity capital.

Among the growth industries, the chemical industry was the only one that increased the proportion of senior securities in its capitalization. This change tended to benefit the rate of earnings on equity capital even though the rate declined relative to that for the 143-company aggregate. The benefit is evidenced by the fact that the chemical industry's relative index of equity profit in 1952-54 was sixth in size among the nine industries, while its relative index of profit on total capital was seventh.

Both the paper and paper products industry and the tire and rubber industry had a very large proportion of senior capital in the base period 1935-39, and both industries substantially reduced the percentage of bonds and preferred stock in the period to 1952-54. The reduction in leverage had an adverse influence upon the rate of profit on equity capital. During this period, the tire and rubber industry, which ranked fourth in rate of profit on total capital, ranked seventh in rate of profit on equity capital.

EVALUATION

This survey shows little relationship between the rate of growth of industries (as measured by their annual sales and improvement) and the rate of profit earned on common equity capital. There may be a basic tendency for the more rapidly growing industries to improve their earnings on total capital to a greater extent than industries growing less rapidly, but the tendency is only one of a number of variables affecting earnings and dividends per share of common stock and the value of stock in the market.

We have observed that the business cycle is an influence, even upon experience over a considerable period of years. In our study the more cyclical industries tended to show better experience profitwise because the initial period of observation was one of relative economic depression and the terminal period was one of relative economic prosperity. Price inflation, the rate of technological development of products, the rate of improvement in production processes, and change in the intensity of competition also tend to affect the profitability of different industries.

The policies of industries and companies in the use of senior capital is a second major variable. Change in degree of senior capital leverage may cause the rate of profit on equity capital to change in a considerably different manner than change in the rate of profit on total capital.

Common stock investors also have to take into account the fact that the profit experience of different companies in the same industry often varies widely, with some succeeding amazingly while others fail. They must remember that the growth of earnings per share of common stock is affected not only by the rate of profit on equity capital but also by the increase from year to year in amount of equity capital per share caused by retention of earnings. And, finally, there is the well-known emotionalism of investors that causes them at one time to pay one price for a dollar of earnings and at another time to pay twice as much for the same dollar of earnings.

ANDREW CARNEGIE is said to have paraphrased a patriarchal maxim to read, "Put all your eggs in one basket and watch the basket." This remark has been seized upon by some observers and applied, in a rather indiscriminate way, to the investment of money. . . . Mr. Carnegie's epigram may be intelligently applied to any line of enterprise in which a man's talents, knowledge, and capital are involved, but not to the investment of his surplus wealth.

—*Thomas Gibson*
SIMPLE PRINCIPLES OF INVESTMENT

JOSEPH R. HARTLEY

Industry Rediscovers **THE RIVER**

IN AN ERA when earth satellites and rocket trips to the moon are being taken for granted, a discussion of river transportation may seem almost painfully archaic. Yet to businessmen the inland rivers are big news. The Ohio River (along with many others) is sparking an economic boom that is rapidly changing the industrial map of America. In the postwar period of rising freight rates and ever-increasing need for industrial water supplies, many firms have been turning to the river banks as a partial solution to their problems.

Activity along the rivers did not increase greatly up to 1950; but since then approximately \$13 billion has been invested in plant and equipment along the Ohio River alone. The growth of steam power generating stations along the Ohio has been so pronounced that some refer to the region as "voltage valley." Two large aluminum smelters have been completed, and another is in an advanced stage of construction—this in a region where the aluminum industry was nonexistent until very recently. Steel mills continue to mushroom on the banks of the Ohio, and the chemical industry seems to have adopted the Ohio and other rivers as permanent mates. River shipments of coal continue to climb so rapidly that they have astounded prognosticators.

In short, the industrial boom along the rivers is so widespread that it can no longer

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be brushed off as a mere flash in the pan. Every forward-looking business executive must at least consider river sites in his plans for future plant construction. A careful analysis of the forces underlying the rush to the river banks should assist him in making optimal investment decisions. The time is propitious for such a hard look at the future of plant sites, now that the economy is emerging from the deepest recession of the postwar period and is preparing for a new period of growth.

HISTORY OF THE RIVERS

The history of river transportation can be divided into three distinct eras. In colonial days the river was, of course, king. Where waterways were available, existing land vehicles and miserable roads offered little competition to water travel. The steamboat seemed the answer to an American prayer. Its development for practical use was followed by the great period of canalization, beginning with the construction of the Erie Canal in 1825. The first phase of development of the Ohio River began in 1824 when Congress appropriated $75,000 for removal of snags below Louisville. But the coming of the railroad coincided with canal construction and early river channel improvement and soon was considered the ideal means for high-speed, cheap movement of people and their trappings. During the remainder of the nineteenth century, river traffic declined and virtually disappeared.

The third era started at the turn of the century when Congress began to provide for canalization of numerous major river systems. The Ohio River was one of the first to receive attention. Starting in 1910, the work continued until the entire main stem was canalized by 1929. Authorization of the project was based on a potential traffic forecast of 13 million tons—but when the final lock and dam were finished in 1929, traffic had already risen to 22 million tons.

The Great Depression retarded traffic growth on the waterways but did not stop it completely. Numerous businesses turned to the rivers in the 1930's for the low-cost transportation. In 1939 the total freight volume on the Ohio had reached 25 million tons. Up to that time canalization seems to have done no more than give the rivers a new lease on economic life. Few persons expected them ever to play more than a very minor role in the transportation system of today.

POSTWAR GROWTH

Total traffic on the inland waterways (excluding the Great Lakes) rose from 9 billion ton-miles in 1927 to 28 billion ton-miles in 1946. The freight movement has burgeoned since then to 109 billion ton-miles in 1956. (In the same decade, total domestic ton-miles of freight rose from 1,006 billion ton-miles to 1,274 billion ton-miles.) The average rate of growth of all inland waterways traffic, excluding the Great Lakes, has been just under 10 per cent per year since 1929. Projecting that rate through 1965 indicates a total potential volume of about 200 billion ton-miles. This would be equal to the total of intercity highway freight in 1955 and one-third of the rail volume. Barge movements on the Ohio River system rose from 5 billion ton-miles in 1946 to slightly under 15 billion in 1955 and hit 16 billion ton-miles the following year. Clearly the growth of river traffic since the war has been little short of spectacular. But the figures alone cannot tell the whole story; for the executive and the economist, they raise more questions than they answer. The chief queries are, "Why?" and "What are its implications?"

NEW FORM OF TRANSPORTATION

Technological Revolution

After the rivers had their heyday, they were put to rest by economists and historians as a romantic but outmoded form of transportation. In this light, the vigorous rebirth of the

past two decades raises the problem of why it should be occurring at all. However, it must be remembered that—since the 1930's—river transportation has undergone a tremendous *technological* revolution. The old paddle wheel steamboat packet may have been Mark Twain's first love, but by modern standards it was a manifestly inefficient piece of transportation equipment. The hand-fired coal or wood-burning boilers used too much fuel; the paddle wheel could not effectively transmit large amounts of power into motion; the reciprocating steam engine was heavy, expensive to maintain, and used large quantities of fuel per horsepower. Perhaps the most serious shortcoming of the steamboat was the large crew required to attend its massive and complicated power system.

The greatest recent development is the shift to the diesel engine. Dieselization has produced even greater returns for the river business than it has for the railroads. It is much more compact and lighter per horsepower than the boiler-steam engine combination. The diesel is more dependable and raises the total annual hours of operation for the towboat by reducing time and frequency for major overhauls. Even more important is the fact that the diesel is much more automatic than the boiler—steam engine combination. A diesel towboat requires only one-third to one-half the crew needed for the old steamboats with hand-fired boilers.

Direct labor economies are vital to the success of the modern diesel towboat. But the increased total power is equally big news. A typical steamboat from the pioneer era of the river's decline might generate up to 800 horsepower, and the 1930 equivalent averaged about 1,500 horsepower. The diesel has completely overcome the power limitations of the old steamer. The shift to the diesel that started immediately before World War II started a horsepower race more productive than Detroit's and equally as exciting for the barge operator or shipper. Builders of the early postwar diesel boats were satisfied to double the power of the old steamers. Then capacities were pushed up to 4,000 H.P. and in the past three years into the 5,000-plus H.P. class. This was enough to make anyone conclude that bigger, more powerful motive units would never be built. Yet, Federal Barge Lines is now making the maiden runs of its new towboat, the 8,600 H.P. *United States*. For the time being the *United States* will be the most powerful towboat in the world, but her crew of 17 will be the same as that of many sister boats with one-third the power. In the transition from steam to diesel, the relative increase in total power of the motive unit has been substantially greater for the riverboat than for the railroad.

The implications of the superpowerful diesel engine versus the steam engine are great. Despite a sizable cut in crew sizes, two to three times as much tonnage can be pushed and speeds have doubled. Faster turn-around time spells more annual output per towboat or barge, higher maximum capacity for a given river or canal, and better service.

Of course, linked to dieselization has been the replacement of the paddle wheel with the twin, triple, and quad screw propellers especially designed for the huge power potential of the diesels. Radar and communications born of the war have increased both safety and management control of the fleets, and have virtually freed the barge tow from night and bad weather shutdowns.

The changes in quality, size, and variety of barges that have taken place during the past 15 years rival that of dieselization for the towboats. The special purpose barge now tailors barge service to the needs of the individual shipper. For instance, a wide array of chemicals that once could not be transported by water can now be moved by special barges.

Separation of motive equipment from cargo units has been another revolutionary change from the old packet boat form of water transportation. The packet boat had a very shallow draft, carried passengers as well as

cargo, and was expensive and inconvenient to load and unload. It was fundamentally a waste of capital to have a large and costly power plant lying idle while stevedores loaded cargo.

The shift to the barge-towboat combination has simply been an extension of the principle that produced the railroad and semi-trailer. Vastly improved flexibility has resulted. Utilization of the motive equipment is much higher, and shippers can load and unload their barges at their own convenience. The shift to the barge-towboat (actually a push boat) is an older phenomenon in the river business than the other technological changes mentioned here, but the use of the multiple and integrated tow of up to 25 and 30 barges cabled together into one rigid unit to be pushed rather than pulled coincides with dieselization. Dieselization made it feasible to put many barges in one tow, and the integrated tow provided a means of utilizing the vast power of the diesel. The physical nature of the barge operation today may be likened to a fast, powerful, continuous conveyor to which freight can be hooked or unhooked at each shipper's doorstep at his convenience. A chain of towboats moves upstream and downstream, picking up barges and dropping off barges as it goes.

The implications of the technological revolution in river transportation equipment can only be sketched here. However, enough has been said to warrant the conclusion that inland waterways transportation is enjoying a boom in traffic because it is a *new form* of transportation rather than an improved old one. The flexible diesel towboat pushing tows of up to 40,000 tons (1,000 rail boxcars) is no more comparable to the small paddle wheel steamboat than the semi-trailer is to the horse and wagon or the pack horse. Both of these new modes of transportation are similar to their predecessors only to the extent that the truck's ancestor moved on land and the barge tow's predecessor moved on water. Viewed in this light, the resurgence of traffic on the inland waterways is no more mysterious than the truck's rejuvenation of over-the-road freight transportation after the railroad had so emphatically outmoded the Conestoga wagon.

New Waterways

The technological revolution in river transportation equipment must share credit for the boom in water transportation with the vast improvement in waterways. Here again a logical analogy can be drawn between the rivers and the replacement of mud roads with superhighways. Ol' Man River was deified by steamboat pilots but he was irascible. The smaller rivers were shallow and permitted only very small boats to transit them. They were full of snags and sand bars. It was common for a boat to hang up on a sand bar and have to wait two weeks for a freshet to lift it out. The sand bars, rapids, and falls in the river forced frequent transshipping and use of portages. Through-movement even on the better rivers depended on water levels and was possible only at spasmodic intervals. The seasonal drop in water levels in the summer and fall meant cessation of service on most rivers. Flood stages were as bad as low water problems. Finally, the few rivers that were navigable in their natural state did not always go where the freight had to go.

In short, freight service on the rivers was unreliable and painfully slow; and lading was subject to serious loss and damage in transit. The railroad offered vastly improved service to the industrial shipper—in many cases at the same or lower cost.

During the past 50 years the Army Corps of Engineers has steadily canalized our rivers until the entire Midwest and coastal regions of America are served by a network of navigable waterways. Canalization removes many of the serious shortcomings of the river as a transportation route. Today the main water arteries have a steady year-round minimum draft of 9 feet or in some cases 12 feet. Floods are under better control and dangerous snags, shoals, and bends have been removed. Canalized rivers are still subject to the criticism

that they fail to serve all shippers. However, the country grew on the waterways. According to the 1950 census, 23 out of the 25 U.S. cities with metropolitan populations over 600,000 were on navigable waterways. (Dallas and Atlanta are the only two cities excluded.) Furthermore, the rush of plants to the water's edge in recent years emphatically demonstrates that if the rivers won't go where the existing factories are, the new factories will go to the rivers.

It All Adds Up

Before examining the use of the waterways by specific industries, the economics of modern barge transportation should be examined from the viewpoint of the industrial traffic manager buying transport service for his company. Barge transportation is a remarkably cheap way to move heavy, bulky raw materials. Average barge revenues are about 0.4 cents per ton-mile while rail revenues average 1.5 cents per ton-mile. Despite current arguments about subsidization of waterways, barge transportation is still the cheapest means of moving heavy bulky freight. Estimated tolls to cover the government's cost for the main canalized rivers, where traffic has matured, are approximately a mill per ton-mile. On rivers where traffic has not matured, the high level of subsidy would seem to confirm the suspicions of the critics of river transportation. Despite the propaganda from both sides in the tolls controversy, everyone will admit that the fruit of the technological revolution on the rivers has been barge transportation with its inherent advantage of providing low-cost mass transportation. A single barge holds between 600 and 1,200 tons of freight or about 15 to 30 typical rail boxcar loads. An integrated tow holds up to four or five trainloads.

While this tremendous capacity yields remarkably low ton-mile costs, it does restrict the utility of the barge for the industrial shipper. One jumbo barge holds as much freight as many small firms ship in an entire year. Hence, only the shipper who can concentrate a large volume of cargo into one shipment can effectively use such transportation. Furthermore, the service is slow; towboats typically run five to eight miles per hour. Both the speed and high-volume requirements of barge service make it relatively unattractive for moving packaged finished products—but admirably suited for bulky raw materials. This clearly restricts the number, size, and type of firms that can advantageously use barge service. However, every firm is indirectly affected by the inherent economies of water transportation.

A CASE HISTORY

Who Uses It?

The Ohio River is one of the main water traffic arteries of the country, and the boom along its banks is typical of a national trend. Like most rivers, the Ohio is essentially an energy mover. Many Americans visualize huge hydroelectric dams when they think of rivers. However, the main navigable rivers are far more important as energy movers than as energy generators. In 1956, coal constituted 55 per cent of the total tonnage moving on the Ohio River, and petroleum and petroleum products comprised another 20 per cent of the total. Thus, roughly three-fourths of the freight on the Ohio system consists of our two basic sources of energy. In descending order of their importance on a ton-mile basis, the energy materials are followed by iron and steel products, chemicals, sand and gravel, sulphur, and a wide variety of miscellaneous semifinished and finished goods.

Steam Power Generation

Steam-generated power has exhibited a pronounced growth curve since World War II. Kilowatt hours generated at Ohio River power stations are running over 9 times the 1939 output, compared to an increase of 4½ times for the country as a whole. The Ohio Valley is rapidly becoming one of the country's major power-generating areas. In 1939, plants on the main stream of the river produced 6 per cent of the national output of

electricity; they are now producing 12 per cent.

The explanation of the astounding developments in electricity along the river is threefold: coal, cheap barge transportation, and water. Some of the richest coal deposits in the world lie in a band stretching from Pennsylvania and West Virginia through Illinois and Kentucky. However, the coal must be moved from the mine to the burning site. Land transportation costs now average close to 50 per cent of the market price of coal. Generating firms are circumventing transportation costs by using Ohio River transportation to move their coal at rates of 3 and 4 mills per ton-mile. In some cases large mines are at the water's edge, so transportation has actually been entirely eliminated by placing the generating station at the mine mouth.

Coal and cheap transportation are not enough, however. The huge new stations sprouting throughout the Ohio Valley use a prodigious volume of water for condensers. Unfortunately, the raw water from many rivers is so polluted that it is useless for industrial purposes. However, under an interstate compact the states in the Ohio Valley are conducting a determined campaign to clean up their river. Most companies along the river that previously had contaminated the water are cooperating in providing facilities for removal of the harmful wastes.

Cheap coal, river transportation, and water have produced a marriage between the Ohio River and power stations that promises to be a long and happy one. The national fuel cost for steam-generated electricity is slightly over 3 mills per kilowatt hour; the average cost for stations in the Ohio Valley is 2 mills, a one-third savings. The shift to the river is aided and abetted by rising economies of scale for generators and boilers. The enormous Clifty Creek generating station on the river at Madison, Indiana, typifies the size of stations of the future. Owned by 15 private companies, it is the biggest in the Valley; has a capacity of 1,290,000 kilowatts; and consumes 4 million tons of coal per year, all of which comes in by river barge. The physical concentration of power facilities is resulting in transportation of energy to local communities by wire instead of in the form of coal.

Aluminum

Aluminum is a newcomer to the Ohio Valley. The story of its arrival is simple: Aluminum must have cheap electric power. A few years ago it was axiomatic that aluminum smelting used hydroelectric power. However, most of the favorable hydroelectric sites have already been developed. As demand for aluminum spiralled upward after the war, the industry went to the Gulf Coast for gas-generated electricity. But rival demands for natural gas have pushed its price steadily upward as better technology has enabled steam-generating plants to reduce their operating expenses. The aluminum industry therefore turned to the Ohio River for its new power requirements.

The shift to the river has not been gradual. Kaiser Aluminum's new smelter at Ravenswood, West Virginia, began operating last year. Olin Mathieson chose Clarington, Ohio (south of Wheeling, West Virginia) for its smelter. Alcoa's smelter at Evansville, Indiana, is in an advanced stage of construction. When the new smelters along the Ohio River system reach their full capacity, they will be producing one-fourth of the aluminum of the country.

Cheap coal-based electricity was not the only attraction of the Ohio River for aluminum plants. Last September, Olin Mathieson started using barge transportation to supply its new smelter with alumina refined at Burnside, Louisiana, from bauxite mined in Surinam (Dutch Guiana). Much of the present movement to the new Ohio Valley smelters is by rail, but the threat of river competition has been a powerful influence in the decision of rail management to quote low rates for

the alumina movement. One of the most important transportation attractions of any navigable river for industry is the salutary influence that river competition has on rail rates. Numerous firms that never ship a pound of goods by barge benefit indirectly through the lower rail rates brought about by the nearby river traffic. A final reason for the migration of aluminum to the Ohio River is its strategic location in relation to the aluminum market. Within a 500-mile radius of the new smelters on the Ohio River lies 70 per cent of the aluminum-consuming market.

Steel

The steel industry discovered the merits of river sites for its plants about 50 years before most other industries. The Pittsburgh complex originated because of nearby rich deposits of coking coal and the availability of the river for moving the coal to the mills. The river sites are still centrally located to receive ore from Great Lakes and Eastern seaboard ports. Although this is still only speculative, the Ohio River, along with many other rivers, may soon become attractive to the steel industry for barge movement of imported ores from coastal unloading points. Nearness to markets is another plus factor. In fact, availability of both steel and water transportation is attracting a host of other industries that will provide a sizable market for the future steel output.

Use of the Ohio River for coal movement is as old as the steel industry in the Valley, but use of barge transportation for movement of finished steel is relatively new. A 300 per cent increase in river shipments of steel on the Ohio has occurred since 1946, while the total U.S. shipment of iron and steel has risen 50 per cent. Finally, steel mills have traditionally had a great thirst for water and rivers can supply it.

Production of metal alloys has become increasingly important, and rivers afford the same natural attractions here as they do for the basic steel and aluminum plants. Cheap electricity is particularly important for a number of the alloy production processes, so the construction of numerous new alloy plants along the Ohio River since 1950 is not a surprising development.

Petroleum

Rivers have a strong attraction for refineries because of the economical movement of crude oil on them, cheap distribution of refined products, and ample water for refining processes. Except for the large Ashland Oil Company refinery near Ashland, Kentucky, the Ohio River is not an important refining area. However, the Ohio, along with the rest of the nation's rivers, provides an important link between the refineries and their markets. On the Mississippi River system as a whole, petroleum and petroleum products constitute 55 per cent of the total freight tonnage. In defiance of the general inflation of freight costs, petroleum barge rates have declined from a peak level of approximately 4 mills per ton-mile in World War II to between 2 and 3 mills at the present time. Big inch pipelines can undercut these rates slightly, but they require a large capital investment and are built only where a steady flow is assured. As a result, pipelines are rarely laid parallel to a navigable waterway.

Chemicals

The chemical industry has literally rushed to the inland and coastal waterways for its new plants. The requirement of almost unlimited supplies of water is particularly important in this movement. Many chemical processes also consume large volumes of electricity. Most of the chemical plants along the Ohio River and its tributaries were located there for these reasons and for nearness to markets and such raw materials as salt, coal derivatives, and natural gas received via pipeline. Barge transportation was a relatively unimportant factor in selection of the plant sites.

However, these plants are finding barge

rates a bonus that they had not anticipated. Various specially designed barges now make barge shipments feasible for an array of chemicals that at one time could be transported only by land. Shipments of chemicals on the Ohio have risen 90 per cent more rapidly since 1949 than has the total chemical production of the United States. Company after company is investigating the possibility of barge shipments. A large complex of chemical plants has developed on the Kanawha River around Charleston, West Virginia, and on the main stem of the Ohio near Wheeling, West Virginia; at Marietta and Cincinnati, Ohio; at Louisville and Ashland, Kentucky; and at Calvert City, Kentucky, near the confluence of the Tennessee River with the Ohio River. Such companies as Allied Chemical, Monsanto, Columbia-Southern, Union Carbide, DuPont, B. F. Goodrich Chemical, General Aniline & Film, and various others have sought out the river. A similar rush to the river banks is occurring throughout the country, especially in the lower Mississippi River valley and along the coastal barge waterways.

Grain

Grain does not move in large volume on the Ohio River but it is very important barge cargo on the Columbia, Missouri, Mississippi, and Illinois rivers, and the New York State Barge Canal. The shift of grain traffic to the rivers has been spectacular since the war. A steady increase in rail grain rates has turned one grain shipper after another to the waterways. For example, barge movements of grain via the Illinois Waterway into Chicago, the leading grain center of the country, rose from 16 million bushels in 1945 to 59 million bushels in 1956. In the same period railroad receipts of grain at Chicago declined from 180 million to 131 million bushels. Chicago now receives one-third of her grain by barge, and removal of the 15-mile Cal-Sag bottleneck that links Chicago to the Illinois Waterway will make way for a further increase in barge shipments. The Mississippi has become one of the major grain export routes of the country.

IMPLICATIONS FOR THE FUTURE

Certainly the most important conclusion that follows from this discussion is that American industry is making a subtle but pronounced movement to the river banks. In the Ohio Valley the boom is only in its infancy. Cheap electric power, a particularly important industrial colonizer, has barely had time to make itself felt in secondary industrial expansion. The development of the huge government atomic energy facilities, the aluminum industry, and the metal alloy plants is a harbinger of what the river's electricity will mean in the future. This, coupled with burgeoning chemical and steel complexes in the Ohio Valley and petroleum refineries on other waterways, adds up to an imposing array of basic industries. Of course, primary industries all attract satellite manufacturing plants. This secondary wave of growth has already started. For instance, GE's magnificent Appliance Park, completed three years ago, was built in Louisville. This central location in the country's major appliance market allowed the plant to receive its large steel volume by barge from upriver and simultaneously enjoy low outbound transportation costs by rail and truck.

Clearly the shift of industry to the rivers is destined to continue. All the attractions of the waterways that have developed since the war remain, and the industrial boom along the rivers will breed a secondary boom of its own creation.

A final consideration is that the Army Corps of Engineers has now begun to meet the rising demands of industry by building superwaterways. Canalization of the Missouri will be completed in the early 1960's. Possible twin locks on the Illinois Waterway are being considered and work on the Cal-Sag bottleneck is under way. Modernization of the Ohio River locks and dams has been started. Replacement facilities will create longer, deeper, and more

stable pools, permitting a reduction of water resistance and a substantial increase in barge payloads with virtually no addition to operating costs. The 46 existing locks will be replaced by 19 new locks twice as long. A major saving will result from fewer and faster lockages. Superwaterways coupled with ever-improving towboats and equipment promise better service and more attractive rates.

The probable continued growth of the American economy in the next 15 years means that we will be consuming an enormous volume of raw materials. Many of these will have to be imported and moved inland to plants throughout the entire country. The inland waterways afford a partial solution to the overseas and domestic transportation problem posed by depletion of our own conveniently located raw materials.

While packaged goods will continue to move by rail and truck, certain basic raw materials and bulky commodities can move best by modern water transportation. This cheap water transportation plus ample water supplies, a cheap link to coal and petroleum, and a generally plentiful supply of land and labor (relative to the Northeast) means the inland waterways are a potent force in industrial planning. Many manufacturing plants that do not use the rivers directly will use them indirectly for the electricity, the wide array of raw materials processed by basic industries along the waterways, and as recreation for employees and executives. Clearly, the inland waterways must be considered in making intelligent plant location decisions of the future. After a stage of pre-eminence for an agrarian pioneer society, the rivers declined greatly in importance. Now they are returning to a prominent role in the world's most advanced industrial economy.

THE river-systems of the ancient world were of great importance in providing main routes of communication, for water-transport (even with Roman roads) was always cheaper than transport by cart or pack-animal. The oldest river-navigations are those of the Nile and Euphrates, but as early as *c* 500 B.C. the French rivers were extensively used for the carrying of heavy goods across country from Marseilles . . .

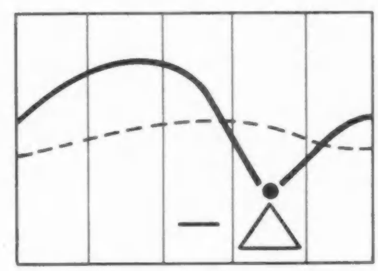
Inland barge-traffic was of considerable economic significance under the Roman Empire. Pictures of the boats are found on monuments erected for members of the powerful bargemen's guild in Gaul. Some depict boats with several oars aside and with the ram bow and curving stern of sea-going ships. Others were apparently double-ended, with high curved stem- and stern-posts.

—*T. C. Lethbridge*

A HISTORY OF TECHNOLOGY

Organized Labor in the Decade Ahead

CONSULTATION



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Although considerable progress has been made in the labor environment over the years, unionism and labor-management relations remain essentially controversial areas. For a balanced evaluation and prognostication of aspects of these problems, BUSINESS HORIZONS called together representatives of employers, unions, and the government. Here is the labor movement in the future as they see it.

Will the labor movement continue to grow?

How can the states improve their labor legislation?

IN LESS THAN 25 years, the American labor union movement has risen from relative insignificance to its present position of profound influence on the entire nation. Its interests and activities affect not only the employers with whom unions bargain collectively, but also condition many of the nation's economic and social institutions. Obviously, the character of future American life will be vitally affected by the growth and objectives of organized labor.

Unionism, however, operates within the societal framework. It is not isolated from the effects of a changing environment. Consequently, the role of the labor movement itself will be conditioned by future events. Labor unions will influence the nation's institutions, but at the same time will be influenced by the evolution and dynamism of American civilization.

Today about 18 million employees comprise the American labor union movement; its future impact upon the economic, social, and political life of the nation will be related in part to the level of its membership.

Fundamentally, unions exist to bargain collectively with employers. This is their *raison d'être*. Although the scope of the interests of American unions has broadened considerably in the past years, the fact remains that their basic mission is to negotiate labor agreements with employers. Certainly, the public interest will be advanced whenever employers and unions can settle their problems without strikes. Though industrial conflict is at times an inevitable by-product of a society based upon the institutions of political and economic freedom, the everlasting challenge to unions and employers is to resolve their problems within a context of industrial peace. Not only are employers, unions, and employees concerned

with the conduct of employer-union relations free from corruption, but the general public has a stake in the problem.

Finally, the future of labor relations in America will be determined in part by the character of labor law. Ever since the advent of unionism in the early nineteenth century, the government has played an important role in the area of union-management relations. The emphasis and objectives of labor law have changed considerably through the years, resulting in profound changes in these relations.

How do our consultants, outstanding representatives of organized labor, industry, and the government, see the shape of the American labor union movement and labor-management relations in the 1960's?

WILL UNIONS GROW?

OUR CONSULTANTS were not unanimous in their judgment about the future size of the American labor union movement. In addressing themselves to the problem of whether or not the union movement will experience a "significant change" in size during the next decade, their estimates ranged from no relative increase as a ratio of the labor force to a sharp increase.

Finnegan did not look for a significant change in the size of the labor movement as compared to the future growth of the labor force.

Finnegan

"To my mind, the key word in this question is 'significant' because it infers something other than the normal increase or decrease in union membership resulting from normal economic activity. Therefore, unless there is some 'significant' change in the institutional structure of business (which is unlikely in the next decade) or a major depression or a catastrophic inflation, I do not believe there will be a 'significant' change in the size of the union movement relative to the size of the entire labor force during the next decade."

Union consultants anticipated a significant growth of the size of the labor movement. Carey declared that "there is no question in my mind but that the union movement will grow during the next ten years. I believe we are approaching the threshold of very substantial growth." Greathouse agreed: "There will be a sizable increase in the number of people affiliated with organized labor, due to the increase in the acceptance of the labor movement, the expansion of corporations, and the disappearance of many of the independent companies." McDonald had a reservation; he stated that "there could be a significant increase in the number of employees represented by unions, depending upon the nation's ability to maintain an expanding economy." Schnitzler felt that

"There will be a significant growth in the labor movement in the next decade because of a combination of circumstances. Technological advances, automation, and the growth of atomic energy industries will convince many workers, I believe, of the truth of the old saying 'In union there is strength.' They will learn, I believe, that the average worker—individually—is powerless, but banded together with his fellow workers, he can insure himself a fair share of the wealth he helps create."

Schnitzler

Of our management contributors, Dirks contemplated a "gradual increase in membership," while Stoner declared that the union movement in the next decade would probably increase at a greater rate than the proportionate increase in the labor force.

"The union today has not only economic strength, but also is becoming an accepted social institution. This will give impetus to the increase of unions in smaller companies. In addition, technological improvements have created personnel-adjustment problems requiring changes of skills and crafts. This, along with new industrial developments such as the missile program, will contribute to union growth."

Stoner

Some of the consultants pointed to specific factors that, in their judgment, would have a direct bearing on the future size of the labor movement. Dirks thought that developments that will stimulate growth of unions include

"a larger working population, a trend toward larger companies, favorable public reaction to better union leadership and more democratic union administration, and, as a result of improved union conduct and standards, a removal of the stigma attached by some people to union affiliation.

Dirks

"On the other hand, certain factors will tend to limit the future size of the labor movement. These include more intelligent personnel administration and more effective communications on the part of employers, unfavorable public reaction to illegal and unethical practices of a few union leaders, and legal restrictions on compulsory union membership."

Clague stressed the significant changes in the occupational structure of the labor force.

"These changes are likely to be of primary importance in influencing the size of the union movement in the decade ahead. This subject has been ably treated by some of the union research analysts. The slowing down of employment growth in the goods-producing industries and the continued rapid expansion of white-collar occupations is limiting the growth of unionism. The unions have not yet found a way to appeal to these expanding occupations."

Clague

Finnegan stressed the impact of automation on the structure of business and the labor force.

Finnegan

"Several economic factors that relate to occupational structure of the labor force, and changes in structure and technology of business can be of primary importance in influencing the size of the union movement during the next ten years. Chiefly, the development of automation will have a decided economic influence and will result in structural changes in business and in the components making up the labor force. For one thing, it will probably increase rather than decrease the tendency toward centralization of control of business, and decrease the number of small independent units or branches of larger units.

"Secondly, automation will create a new kind of worker, a skilled white-collar factory hand. He will be a production worker and will look to unions to represent his interests. However, the net effect on union membership rolls might be negative because one such worker will replace many blue-collar factory hands in the obsolete plants."

McDonald declared that many factors will be of significance, such as the degree of automation and technological improvements, the extent of success in reducing hours of work, changes in the composition of the labor force, and alterations in existing labor law.

McDonald

"However, the most important factor influencing the size of the labor movement will be the stability and health of our national economy. Population trends indicate a continuing growth in the labor force. By itself, this is not enough to insure a growth in the number of employment opportunities. However, constructive economic policies geared to expand our economy and to utilize all our productive facilities will result in a growing, employed labor force. American trade unions will succeed in organizing such new workers at least as successfully as in the past, and probably even more effectively."

Greathouse emphasized that the size of the labor movement will be primarily influenced by the establishment of more large corporations and the expansion of others, by an increase in employer associations through better acceptance of unions by the general public, and by the elimination of corrupt influences in the labor movement itself.

THE SOUTH AND THE WHITE-COLLAR WORKERS

IN COMPARISON to other areas of the nation, the labor movement has, in the past, not been spectacularly successful in its organizing efforts in the South and among white-collar workers. These areas represent the two most important pockets of nonunionism.

Finnegan thought that the success of organizing the Southern employee depends on the future character of racial relations and the economic structure of the textile industry. With respect to the white-collar worker, he felt that unions within the next ten years will have no more success in organizing white-collar workers than they have in the past. In his words:

"If the issue of race relations continues to create social tensions in the South, organization efforts cannot succeed. As long as segregation continues, the labor force will be split and unorganizable. Furthermore, the textile industry is the key to organization in the South, and it will not respond to organization so long as the market for textiles remains soft and the unions cannot negotiate significant economic benefits that might provide an inducement for the unorganized to join unions."

Finnegan

Schnitzler also pointed to the racial problem in the South as a factor in union progress.

"Part of labor's trouble in the South, at the moment, is a direct result of the civil rights battle in which the American trade union movement has taken the only principled position—strong and outright opposition to segregation. While the battle is certain to be long and bitter, the moral justice of our position must ultimately triumph. I believe that when this issue is resolved, labor will go on to greater organizing victories in the South."

Schnitzler

In the white-collar area, he anticipates growing success of unionization among these employees:

"The automation of the office is revamping it into a 'factory' of sorts, with the end product being a piece of paper—not a machine. But the interests of office workers are daily becoming more closely identified with those of the worker in the shop. Therefore, I believe the organizing potential here is very good."

Greathouse concurred:

"Organized labor will be more successful in the organization of Southern industry as the amount of industry increases there and as the confusion over integration subsides. As far as the organization of white-collar workers is concerned, that too will increase as more and more workers who have been employed in manufacturing industries move into the white-collar field."

Greathouse

Carey used the successes of his union in organizing in the South and the growing importance of the "gray-collar" workers—those halfway between production jobs eliminated by new automatic processes and the older type of engineering—to support his opinion that unions will become increasingly important in these areas.

"During the next decade, I foresee considerable increase in union membership in some sections of the country—such as in the South, where my own union, the IUE, has already had a number of significant successes.

Carey

"White-collar workers are also showing increasing interest in trade unionism in many industries. Equally important is the fact that trade unionism is almost certain to grow among the increasing number of 'gray-collar' workers. In every mass production industry, these people—who watch dials, regulate valves, and make sure that automatic machinery is running automatically—are constituting an ever-increasing segment of the total work force. I feel sure they will be joining trade unions in large numbers."

According to Stoner, the inflationary trend has caused unrest among office employees. If this continues, the most substantial union growth in the next decade may occur in this area. He added:

Stoner

"If company managements are intelligent and treat the professional and supervisory employees as part of the company management, they will obtain even greater skills from personnel in this area; however, if they do not, the next great union surge will be from within these groups."

For his part, Dirks anticipated that organized labor will be more successful in unionizing Southern industry and white-collar workers during the next decade, but "at a moderate rate." He looks for a "limited growth of white-collar unions" and for "some organizing success in the South."

PEACE OR DISCORD?

SIGNIFICANT PROGRESS has been made in union-management relations. The proportion of production time lost because of strikes has declined over the years, violence to persons and property during industrial conflict has largely disappeared, and disputes arising from the interpretation and application of existing agreements are largely settled in a peaceful and orderly manner through the operation of the grievance procedure and arbitration. On the whole, there exists a more wholesome climate in labor relations than was true in the early days of union organization.

Although Finnegan is identified with neither union nor management interests, he stated what he believed management and unions would expect from each other in the achievement of industrial peace under collective bargaining in future years.

Finnegan

"As in the past, so in the future; the union leaders want continued respect and recognition. If management wants responsible leadership from union officials, management will have to accord the union officials the respect to which they feel entitled.

"On the other hand, business expects unions to demonstrate increased responsibility, cooperation in the introduction and execution of technological improvements, and recognition that management's insistence on retaining its prerogatives is not synonymous with antiunionism."

According to Dirks, business expects organized labor to demonstrate a willing response to intelligent management leadership in producing better products and lower costs.

Dirks

"This means improved personnel efficiency, greater versatility and flexibility in work assignments, moderation in requests for economic gains, and improved understanding of the realities of business. Labor leaders, along with business leaders, should promote such practices, rather than suspicion, distrust, and unrealistic economic proposals."

Stoner maintained that there should be a reciprocal recognition of the problems of management and unions to promote industrial peace under collective bargaining.

Stoner

"Industrial friction can be lessened only if management will stop viewing most problems as solely management problems and will not refuse to admit that difficulties exist. Management must recognize that there are difficulties with which the union is also concerned. If we can develop in management a genuine concern about the honest problems of the union, and if the union will take the same genuine concern about company problems, we can achieve industrial peace. This must be a respect for the other fellow's private property and personal liberty and not just one's own. The only alternative is increased governmental control. Labor and management must receive from each other and give to their respective groups aggressive, ethical leadership if we are to obtain industrial peace."

Union consultants stressed the need for acceptance and understanding of unions and their problems as a fundamental factor in the promotion of industrial peace under collective bargaining. Greathouse and McDonald agreed that labor expects an acceptance of social responsibility by management.

McDonald

"It is hoped that management will, in good faith, accept the choice of its employees in selecting union representation and collective bargaining as the most constructive and efficient method of advancing not only industrial peace, but also the interests of the nation as a whole. For this to be accomplished would mean, among other things, an end to outright and covert attempts to weaken collective bargaining and unions through support of misnamed 'right-to-work' legislation and other repressive antilabor legislation of various types. There must be an end to efforts to separate labor union membership from their elected leaders, and a cessation of invalid economic propaganda designed to hide a drive for exorbitant profits by falsely blaming price increases on wage adjustments earned by productivity growth."

Schnitzler suggested that the greatest contribution of management to industrial peace under collective bargaining would be the acceptance of unions and collective bargaining as "a fact in our industrial society." Failure of management in this respect could not only cause industrial discord but could lead to economic difficulties.

Schnitzler

"Those companies that still fail to bargain in good faith and still seek to destroy unions (either openly as in the case of Kohler, or through use of nefarious individuals like Shefferman, or through union-busting legal devices like the right-to-work law), do grave damage to industrial peace, grave harm to the best interests of their stockholders, and irreparable damage to the national economy."

Carey believed that employers should demonstrate "understanding" and a

Carey

"sense of practical reality, as differentiated from the sound of their own words at NAM and Chamber of Commerce conventions. Recognition must be made that, in the labor-management field, 'two heads are better than one,' and that labor has much to offer in the form of ideas, suggestions, and a sense of responsibility to itself, to management, and to the general public."

THE ROLE OF GOVERNMENT

AS THE DIRECT representative of the public, government has a particular interest in the promotion of industrial peace. Consequently, the question arises as to the proper role of government in the quest for industrial peace through collective bargaining. In dealing with this question, a common thread runs through the comments of our consultants—in a free society, government should assume a neutral role in the area of labor relations, and its major emphasis should be on the voluntary settlement of industrial disputes, free from government coercion and compulsion.

Clague underlined this proposition when he said:

Clague

"The role of government is to direct its attention to the 'rules of the game' but to refrain as much as possible from becoming the final agency to settle specific industrial disputes. Government can play an important part in mediation and conciliation, as evidenced by the activities of the Federal Mediation and Conciliation Service."

Finnegan declared that one of the major problems of the service that he directs is to "defend ourselves from the efforts of our friends who want to give us more authority." He emphasized that "the essentially voluntary nature of our free collective bargaining system recognizes that economic conflict and some disputes will inevitably arise."

It is against this background that the function of government in the promotion of industrial peace through collective bargaining must be assessed. Finnegan stated that

Finnegan

"the government should continue to make mediation available and provide the ablest mediators (which the Federal Mediation and Conciliation Service is presently doing) to assist the parties who desire a settlement to achieve it. The government must not impose settlements nor require enforced mediation, except in situations obviously bearing on national health, safety, and welfare. It must be clear that the responsibility for bargaining settlements lies with the parties, not with the government."

Our union and management consultants likewise endorsed a policy of freedom from government coercion in the area of industrial relations. For example, Schnitzler and Stoner asserted that

"the government's role should be to establish fair and definite ground rules that treat both management and labor as equals, and decree that honest, fair collective bargaining is the public policy of the United States. There should be no governmental interference in collective bargaining relationships between employers and unions.

Schnitzler

"The role of government in collective bargaining is similar to the role of the neighborhood policeman in the life of the community—the citizens must, by actions and words, maintain law and order, and the policeman enters only when there is a breakdown of standards. Society looks to management and labor to bargain collectively without governmental assistance unless the community interest is endangered."

Stoner

Dirks recommended that government should

"establish a minimum number of fair ground rules and enforce them impartially; stay out of labor disputes except to offer conciliation and mediation and to protect the public in case the national health and safety are seriously endangered; and enforce criminal laws to assure that all citizens are fully protected in the rights guaranteed to them by the Constitution."

Dirks

while McDonald stated that

"the greatest contribution government can make to industrial peace is to amend existing labor legislation so that once again it will become clear that encouragement of free collective bargaining is government policy. It should change the method of administering labor legislation so that the appropriate administrative body is neither politically-oriented nor antilabor-motivated, and continue adequate mediation and conciliation machinery."

McDonald

IMPROPER PRACTICES

DISCLOSURES OF corruption, dishonesty, and racketeering and collusion within labor unions and management have been revealed by the McClellan Committee, the AFL-CIO Ethical Practices Committee, and grand juries. These findings have not only shocked the public, but have startled responsible labor leaders and management representatives. As yet Congress has not enacted any general legislation to evaluate improper practices. The Kennedy-Ives bill was overwhelmingly passed by the Senate in the last session of Congress, but the House failed to approve the legislation. Our consultants were asked to comment on this sordid feature of labor relations and to determine whether these practices will be greater or less extensive during the next decade.

Union contributors to the symposium recognized the need for the elimination of racketeering elements from the union movement, although they felt that the public has received an exaggerated picture of the extent of corrupt practices within the union movement. Some of their remarks indicated that

they believed that government aid would be a desirable supplement to the efforts of unions to clean out the racketeering by self-policing action. Carey insisted:

Carey

"We are going through a passing phase. Corruption will be, corruption must be eliminated from the American labor movement. Never so great as the headlines have tended to imply, corruption is bad in whatever form it is found. Ten years from now, I am confident that labor will have done the job of cleaning out the racketeers from its ranks—perhaps government may even help in this process!"

McDonald stated that racketeering has not been extensive and that

McDonald

"the major obstacle to be overcome is the desire on the part of some management interests to magnify the findings of the McClellan Committee, and to capitalize on the results by pressing for punitive, antilabor legislation aimed at weakening, if not destroying, the labor movement."

Concerning the extent of malpractices within the union movement, McDonald declared:

"Senator John F. Kennedy, a member of the McClellan Committee, noted in a recent speech that less than one-tenth of 1 per cent of American labor leaders have been involved in the improper practices highlighted by that committee. This scarcely can be termed 'extensive.' Despite the jubilant publicity given to the committee's proceedings, it is clear that improper practices are at least as 'extensive' in industry and business, and perhaps in every other area, as in labor. With proper safeguards and the records of the AFL-CIO in 'self-policing,' it can be predicted confidently that improper practices in the labor movement will decline even further in the years ahead."

Greathouse stated that improper practices in the labor-management field

Greathouse

"will be less extensive in the future when those violations that have been going on unchecked for some time have been exposed, and action taken to clear them up. I do not feel that new cases are developing to any great extent; once the old ones are exposed and proper safeguards established, this situation will clear up and the experiences will lessen.

"To curb improper practices, there must be proper accounting and safeguarding of all union funds, plus disclosures of expenditures. This should apply to expenditures by corporations of all monies spent in the management-labor relations field, and to management's attempt to influence the public on policy or thinking on any matter."

Schnitzler contemplated that

Schnitzler

"the Congress will adopt sound anticorruption legislation similar to the best provisions of the Kennedy-Ives bill, defeated this year by an unholy alliance of the NAM, the Chamber of Commerce, the

Teamster's union, the Mine Worker's union, and Administration Republicans in the House of Representatives. With such legislation, the trade union movement can complete the task of ridding its own house of those corrupt elements that have infiltrated the movement."

Finnegan agreed, adding that government must act to preserve the integrity of the collective bargaining system, whether it is endangered by improper practices, by government control, or by weak administration of protective legislation.

However, the Director of the Federal Mediation and Conciliation Service felt that there was an even deeper problem.

Finnegan

"Improper practices in collective bargaining, whether by unions or management, reflect a weakness in the moral fiber of the community at large. Law itself will not strengthen that moral fiber. What is needed is a reawakening on the part of the American people that will result in the realization that might does not make right and that freedom is not license. Labor, business, religion, education, and every other community organism must be alert to prevent and eradicate corruption within its own ranks and combat mental attitudes that would placidly tolerate corruption outside its ranks. When such alertness is general, improper practices will not be a problem in labor-management relations."

In dealing with the problem of dishonesty in the labor-management field, Stoner drew a parallel between business and labor efforts to eliminate malpractices on a voluntary basis. He stressed the need for legislation to curb racketeering practices in labor relations.

Stoner

"There will be more investigations and legislation in the labor-management field because there is no more reason today to expect unions to voluntarily police their organizations than there was to expect business to do it on a voluntary basis. Business did not do it, and the public demanded regulation. At the moment, I see no indication that the unions will do it, so the result will be increased legislation.

"As unions and businesses increase in importance, the public interest in them also increases. This places on both management and labor the requirement of strict accountability to the public for their practices. If this community responsibility is not accepted voluntarily by both groups, legislative action is inevitable. Healthy, constructive basic legislation, such as the Kennedy-Ives bill, is possible if both labor and management can act to maintain and, in some instances, regain public confidence. If this does not occur, a real danger lies in the desire of some people to make political capital of alleged reforms at the expense of certain groups. This might be detrimental to industrial peace."

Dirks, our other management contributor, felt that improper practices will be eliminated slowly. He declared

that "public opinion will not permit these practices to continue unheeded indefinitely. There will always be some corrupt men, but they will find it increasingly difficult to operate." In the effort to curb racketeering practices, Dirks highlighted what he believed to be some major obstacles that must be overcome. In this category he included

Dirks

"apathy on the part of the public and union members, laxity in enforcing present laws, an attitude on the part of some people that the end justifies the means, lack of democratic processes in some unions, political expediency, and downright dishonesty on the part of a few employers and union leaders."

COLLECTIVE BARGAINING: PROBLEMS AND PROCEDURES

OVER THE PAST years, the collective bargaining process has dealt with an increasing number of issues and problems. Indeed, the typical labor agreement in force at present bears little resemblance to that which was in existence, say, 50 years ago. In addition, there have been significant changes in the structure and procedures of collective bargaining. What does the future hold in the way of collective bargaining practices and procedures? What will be the major collective bargaining issues that will confront business and organized labor in the next decade? Will there be a significant change in the substance of the labor agreement in future years?

Clague expressed the opinion that the collective bargaining issues will be very similar to those of the past—namely, emphasis on supplementary fringe issues. Finnegan suggested that a basic conflict between management and organized labor in the future will result from the emphasis of unions on increasing standards of living for their members and for family security as opposed to management's desire for more latitude in the use of manpower and for a limitation on increased labor unit costs of production.

Greathouse believed that the major problem in collective bargaining will be the

Greathouse

"expansion of social benefits now contained in many contracts and the acceptance by management of programs whereby they will share with their employees and the public as a whole the savings made possible by increased productivity and technological changes. I think that a way must be found to make industry work for people, rather than having people work just to make profits for industry."

Although Carey stated that only "foolhardy prophets predict what people will be talking about in ten years," he ventured that

Carey

"future collective bargaining is almost certain to rest on these fundamentals: rising standards of living, improved security for working people, and greater emphasis (along with government

efforts) on providing better status and economic standards for the rapidly growing older and retired elements of the population."

Dealing specifically with the most important future collective bargaining issues, McDonald included within this group "wages, reduced hours of work, work guarantees, and adjustments to automation and other technological developments, such as retraining, seniority, severance pay, and vested pensions."

Our management consultants shared the expectation of the union contributors that future bargaining problems will be in the area of worker and family security, although they believed that other items will also be major issues at the collective bargaining table. Dirks contemplated that among the more important issues in the future will be

Dirks

"reduced hours of work in the form of a shorter workweek, longer vacations and more holidays, the development of noninflationary wage and benefit programs, increased stability of employment and income, and efforts by unions to extend the scope of bargaining into areas now reserved to unilateral management decisions."

Stoner, anticipating the more extensive use of technological improvements in the future, stated that "the retraining of workers whose skills are not needed and placement of these workers are becoming increasingly important items for discussion." He also believed that wages will remain the principal issue of collective bargaining, assuming the continuation of the inflationary trend.

Stoner

"As the standard of living increases, social security within integrated company pensions, unemployment insurance, supplemental benefits, and health insurance will all return to the center of the bargaining table."

LAW OF LABOR RELATIONS

THE CHARACTER of the law of labor relations determines the legal duties, responsibilities, and rights of employers, employees, and unions. In a large measure, the future of collective bargaining and unions will be determined by the shape of labor law. By its very nature, labor law is a controversial issue. As yet government has not been able to construct a general public policy that at once satisfies all the participants involved in and affected by the collective bargaining process. In general, management criticized the Wagner Act, and in general, organized labor has condemned the Taft-Hartley law.

Because of the importance of the problem of labor law, our contributors were asked to comment on what they thought to be the proper policy of national and state governments and of the courts in the area of labor relations. Some of their

remarks concerned the possibility of alterations in the Taft-Hartley law, which has remained virtually unchanged since its passage by Congress in 1947.[1] The stability of this law is somewhat remarkable, since employers, unions, and elected and appointed public officials have frequently and vigorously endorsed important modifications. Despite changes in the political structure of Congress and the national administration, the law remains practically unaltered since its enactment.

Dirks recommended that government should

Dirks

"maintain the minimum number of impartial laws to protect the public interest and the personal freedom guaranteed by the Constitution, enforce all laws impartially and fearlessly, and stay out of private labor relations squabbles except in extreme emergencies. Courts and administrative agencies should confine their activities to interpreting laws—not making them through their decisions."

With respect to Taft-Hartley, he did not contemplate any "basic" change in the next decade. Stoner tended to agree, stating that the government, beyond the basic ground rules now established, has a role in labor relations only when the national interest is threatened. "We do not call the policeman on the beat into our house when there is a family decision to be made—only when the family activity endangers persons or property is this necessary."

Our union consultants felt that the general policy of government should be the support of the collective bargaining process. Greathouse contended that public policy should encourage organized labor and management to bargain collectively at all levels on matters affecting them. Furthermore,

Greathouse

"national and state governments should provide experts, including technicians, to assist in this field; and all three should develop attitudes helpful for improving the economic and social status of the entire nation."

McDonald, Carey, and Schnitzler foresaw important changes in the Taft-Hartley law within the next decade, and Greathouse believed that "some much needed changes" probably would be enacted. McDonald said:

McDonald

"The many areas of the Taft-Hartley law that are destructive of sound labor-management relations and that have been apparent to some, will become apparent even to management representatives, legislators, and the public in the years to come."

Carey stated that "if there is no significant change in Taft-Hartley in the next 10 years, that change will be 21 years late!"

[1] In 1951, Congress eliminated the union-shop election from the scope of the Taft-Hartley law.

In the general area of public policy, Carey recommended:

Carey

"Government should take an affirmative position in support of the collective bargaining process and realize that responsible bargaining between responsible unions and responsible management is a national asset. There is no substitute—no short cut—in a democratic society for the collective bargaining process. Hence, it should be encouraged."

Schnitzler was convinced that "the Taft-Hartley law will be substantially amended, as it should be, to eliminate injustices and inequity toward labor."

ROLE OF THE STATES

DURING THE LAST several years, increasing attention has been given to the role of the states in the area of labor relations. Part of this interest has been stimulated by the enactment of right-to-work legislation, Supreme Court decisions defining the proper sphere of federal and state authority, and recognition that an area of labor relations falls solely within the realm of intrastate commerce.

Accordingly, our contributors were asked to comment on whether or not the states should play a more important role in labor relations legislation in the next decade. Their remarks indicate that there is a proper place for the states in the labor field, but the contributors had definite ideas about how the states should exercise their authority. Some of the contributors feared that state action in the area of interstate commerce could lead to confusion and unequal treatment of business and employees engaged in the production of goods and services for national product markets. Stoner put it this way:

Stoner

"There is a danger if state control of labor relations emerges as an increasing factor. We can no more have state barriers to business growth and expansion than we could have had state tariffs. If we are to achieve effective decentralization of business, we must give to business the flexibility and freedom to move where necessary with uniform operating personnel policies. With a host of contradictory state laws, this would not be possible for plants with multiple operations."

Dirks did not believe that the states should play a more important role in the future, except to see that existing basic local and state laws are enforced. He declared that states have responsibility for necessary legislation covering intrastate business and that a "better definition of this area is needed."

Union consultants are of the conviction that state laws should not apply to the area of interstate commerce. McDonald emphasized one problem of state regulation.

McDonald

"Basically, labor-management relations cross state lines. Accordingly, each attempt by individual states to regulate some aspects of labor-management relations has succeeded only in adding confusion and difficulty."

Schnitzler suggested that states adopt sound, progressive labor-management legislation dealing with intrastate commerce, but "they should be discouraged and prohibited from entering the field of interstate commerce, no matter what the size of the concern and no matter how few employees are involved. Balkanization of labor-management relations leads inevitably to a return of the law of the jungle."

Carey mentioned that, in recent years, the effort to give the various states a more important role in labor relations legislation

Carey

"has been essentially a not very well concealed method of harrassing the effectiveness of labor union bargaining by establishing state-wide restrictions that reactionary groups know they cannot possibly foist upon the national Congress. But there is a big, legitimate role for the states to play in improving minimum standards, in passing state Wagner Acts, and in repealing the vicious and deleterious frauds that are described as right-to-work laws."

With respect to the state issue, Greathouse asserted that the states should enact legislation patterned after the National Labor Relations Act to handle matters not covered by the federal law. In addition

Greathouse

"States should also provide minimum standards such as a minimum wage, equal pay for equal work, laws governing nondiscrimination because of race, sex, or national origin, and should provide qualified experts to assist small companies and unions in their collective bargaining activities. States should also take whatever action is necessary to provide for the implementation of provisions worked out in contracts, and should not pass laws that tend to hamper the effectiveness of certain provisions of contracts when the welfare of the general public is not involved."

THOUGH OUR consultants have differed in their views on particular issues, they have agreed as to what are the crucial problems regarding organized labor and union-management relations in the future. They have highlighted these problems and expressed in a forthright manner their positions and expectations. Regardless of whose views are corroborated by future events, the fact remains that the areas examined will deserve the full attention of participants in and observers of unionism and labor-management relations.

LRP is not a flying leap into the future; it is a method of changing the status of your business.

A *Blueprint* For Long-Range Planning

TULLY SHELLEY, JR./ANDRALL W. PEARSON

REASONS for the strong and growing interest of top executives in long-range planning are obvious. Planning of all types has become an essential ingredient in most successful businesses, and progressive executives are always looking for ways to make them more effective. Benefits already are accruing from short-term plans; clearly, if planning can be pushed farther ahead, these benefits can be multiplied.

Despite the recent furor over long-range planning (LRP), it is not dramatically new and revolutionary. It is essentially a formalized extension of the decision-making process that goes on all the time in any well-run business. Certainly no well-managed business consciously makes short-term plans and ignores the long-range picture. For example, nearly any facilities commitment or research plan has long-range implications. And in much of the written material on LRP, the emphasis is on planning specific operating programs rather than on seeking to predict the future.[1]

Thus, if we can agree that LRP is primarily a means of *formalizing* and *extending* present management practices, much of the mystery and fogginess clears away. If we can further agree that it is unnecessary to predict the future accurately to successfully plan for it, LRP can be brought into even better focus.

LRP IN LARGE BUSINESSES

At some risk, we submit that formalized LRP is more essential to top management in large, multidivision or multiproduct corporations than in smaller companies. The reasoning is simple. Since business began, chief executives

The coauthors, Tully Shelley, Jr. and Andrall E. Pearson, are associated with McKinsey and Company, Inc., as management consultants.

[1] See William D. McEachron, "By Long-Range Planning Shape Your Company's Future," *American Business*, XXVIII (February, 1958), 22.

of smaller companies often have operated successfully without benefit of formalized plans of any kind. They know clearly what they want to achieve and how they are going about it. Communication concerning these goals and programs is simple, direct, and subject to ready change. Formalized planning, while it may be helpful, is neither an essential nor a guarantee of success. And there are endless case examples of successful enterprises to support this contention.

The large corporation, on the other hand, has undergone many changes in recent years. Diversification has, in some cases, become popular—if not critically important. Decentralization prevails in many companies. Decisions have become monumental in scope, and they take longer to implement. Access to capital has eased, but the opportunities to spend it have multiplied.

What have these changes meant? Top management often faces the necessity of controlling an empire without having intimate knowledge of its operations. Time must be spent on top-level administrative problems rather than on operating decisions. Key decisions are required in situations often unfamiliar to the corporate executive group. And the need for shaping the corporate destiny becomes more urgent under continuing pressures and opportunities to expand.

Most of these major corporate decisions now involve committing funds, manpower, and the direction of corporate growth for many of the years ahead. For example, a request was received in a large consumer goods company for a $20 million plant expansion for one division. The chief executive of the corporation said, "How can I approve this request? I'm not sure of their forecasts; they don't seem to be making progress in their industry, and I'm not even sure it is a good business for us to be in!" He initiated a long-range planning project in this division. The request for new facilities was turned down in favor of a much larger research budget when the division's plan was completed. For they found that new products—rather than existing products—would very likely dominate the industry within five years. Their proposed facilities addition would have been a monument to poor long-range planning. After this experience, that corporation installed LRP requirements in each of its operating divisions.

Against this background, the need for some type of formalized planning is obvious. This need is the driving force behind the growing interest in formalized long-range planning. Many top executives have found that LRP can provide:

- A clearer picture of where the business is headed, a day-to-day guide
- Sounder facts for decision-making
- A focus on major, long-term opportunities to help management decide where to put its time and resources
- Improved coordination and teamwork for solving major problems, which invariably cut across organizational lines

OVERCOMING THE ROADBLOCKS

Our experience indicates that two problems stand in the way of a broader application of long-range planning to top management decision-making. One is a feeling that LRP is both involved and abstract and unrelated to normal business operations. The other is the very practical problem of time; LRP takes time that is needed to operate the business.

Neither of these problems can be shrugged off. Long-range planning has traditionally been associated with high-flown economic forecasts and nebulous predications. Even in well-managed businesses, many so-called long-range plans have been nothing more than five-year flying leaps at sales and profit projections. It is easy to understand how a practical chief executive could become either suspicious or disenchanted with any subject having such a history. The time problem is acute. Any experienced manager knows that good long- or short-range planning takes time. Moreover, in the drive for excellence, many planners spend the proverbial 90 per cent of their time trying for the last 10 per cent of perfection. There is no place for perfection

in any type of profit-oriented planning, and it is especially impractical when dealing with long-range considerations.

Because these problems cannot be dismissed with a few well-chosen words, attention must be focused on the requirements of *making long-range planning a practical extension of the management process instead of an ivory-tower exercise and gearing the job to the practical time limitations of the typical operating executive group.*

We have found that four principles, which have been characteristic of nearly every successful LRP effort we have observed or assisted with, have developed from the attempts to meet these specifications. Our experience indicates that, in one way or another, these four elements have been applied in enough situations to serve as guides for any prospective long-range planners:

1 Start by setting goals for each key element of the business

2 Make sure plans are limited to major programs and attack them on an integrated basis (across functional lines)

3 Gear the job to operating executives and avoid ivory-tower staff groups

4 Make sure that plans for the current year are related to longer-range plans, thereby making the profit-planning process more realistic

Start With Goal Setting

The first step to effective long-range planning is to set goals or targets. This may seem elementary, but surprisingly few large businesses have formal goals to guide their executive group. The requirement for formalized objectives applies especially to larger corporations. Here the executive group often lacks the day-to-day contact—typical of smaller "one-man" companies—needed to communicate by actions, and the need for meaningful written objectives is much greater. In this situation, the various kingdoms of the corporate realm frequently work out their own goals; all too often they conflict.

One of the major problems of corporate or divisional goal-setting is definition: What is meant by goals? We have seen many attempts —all of them failures—to define goals precisely. Increasingly, we have come to apply a very general question: "Where do you plan to go in each *major* segment of your business?" Here is an example of what happens when formal goals are lacking:

> The sales department sets a target for the following year or so to increase sales volume, say 10 per cent per year. This is often accompanied by a market plan that indicates product line goals and the type of advertising and promotion. The controller, in the meantime, has become concerned with a declining return on investment and has put pressure on the manufacturing department to reduce costs. Manufacturing says that costs can be reduced if they have longer production runs and eliminate marginal products. But such eliminations make it more difficult for the sales department to achieve its goals. This is a simple and typical example of conflicting objectives within a company. And sometimes these conflicts result in a decision to proceed in accordance with the point of view of the stronger executive. Such action may be adequate but usually it is not as good as an integrated approach; that is, a pulling together of the different points of view and directing the coordinated effort more realistically. In the case just described, the goal might be to eliminate marginal products and grow *only* when long-range improvement in return on investment can be expected. Otherwise, if the sales point of view predominated, the result might be growth in volume and a decline in return on investment.

Two Types of Goals. Such companies as General Electric have established *general* objectives that have proved very useful.[2] To illustrate, a company might aim for growth from its own new products, technological leadership in each of its businesses, a fair return on investment from each operating division, or a working climate that develops each individual's talents to the maximum.

This type of generalized goal, as Cordiner points out, is useful because it can be readily

[2] Ralph J. Cordiner, *New Frontiers for Professional Managers* (New York: McGraw-Hill Book Co., 1956), pp. 119-21.

communicated throughout the enterprise and because the need for thinking about and discussing these goals—before their publication—has major educational and communications value to top management.

The limitation of these general goals is that specific programs cannot be built upon them. Nearly any action program applies to nearly every goal. Thus executives cannot readily and specifically translate these general terms into action. This does not erase the need for them; it merely creates a need for what we have termed "subgoals." These are merely more specific (preferably quantitative) extensions of the general objectives of the business. As examples, one company's long-range plan seeks to increase its share of the market by 3 per cent within three years, lower product costs by 15 per cent over the next five years, isolate and retain all cost savings except those required to sustain competitive position, launch five new products over the next eight years, and lower distribution costs by 25 per cent.

Clearly, each of these subgoals can serve as a basis for the appraisal of long-term action programs. For example, combined planned product cost reduction programs should give reasonable promise of cutting product costs by 15 per cent. Isolating and retaining cost savings, in this company, requires major changes in the accounting and reporting procedures as well as changes in the approach to competitive bidding and pricing. Their goal of five new products is a clear indication of the extensive research necessary during the eight-year period.

Basis for Goal-Setting. Subgoals are not to be legislated capriciously or "blue-skied." Unrealistic goals are just as unsound in long-range planning as in any other management activity. Unfortunately, there is no formula for setting realistic ones. We can, however, offer two suggestions to help assure sensible target-setting.

First, limit your goal-setting to *major* areas or considerations. This suggestion relates to one of the mortal enemies of LRP—overdetail. It is neither practical nor necessary to have goals or subgoals for each operating activity or unit. Management must be willing to limit its goal-setting to critical areas for long-term success; and by implication, it must be able to agree on the key requirements for long-term success.

The *second* suggestion to facilitate sound goal-setting is to start with a careful study of your industry environment *as the basis for appraising your company's position and its strengths and limitations.* In one instance, a division of a large chemical company made elaborate preliminary plans for costly new product research, since new products were undercutting its market position. An analysis of the industry, however, showed that the life cycle of these new products was so short that serious doubts could be raised as to their practicality. Most of the industry's new products were being developed by newcomers to the industry, who uncovered them as a by-product of a broader screening program. Few of the new products already launched were developed by going competitors. Consequently, this company decided to rely primarily on others for new products and to become the distributor for the new product developers who did not have adequate volume to support their own distribution organizations.

Another example of how goals can be based on an industry study can be found in a company currently producing heavy equipment for the power industry. A single product producer, it had instituted a major program of developing new products in order to decrease its reliance on one product. The management examined the industry outlook and concluded that growth requirements of the basic product business were such that it would be unwise to launch any important new products for at least five years. Furthermore, it was observed that recent dedication to new product development had weakened the company's market position in the basic business. This company now is dedicated to a major rebuilding job in its major product area.

Management Discussion. We have frequently heard experienced operating executives proclaim, "These goals are like motherhood. How can anyone be against them?" We

concede that goals must be fairly general if they are to be applicable to a broad base of related decisions or programs. But if they appear impossible to oppose, one of two things is true. Either you have not been specific enough, or, more likely, you have not agreed upon the meaning of the goal.

For example, some companies in the cigarette business have decided to provide the blend with the best possible taste, placing the reduction of nicotine and tars in second place. Other producers have chosen to compromise on flavor to achieve lower delivery of the smoke solids that are purported to be health hazards. The goal to offer to consumers "the finest smoking cigarette in the industry" is impossible to oppose *unless* you want to offer "the greatest protection in the industry."

To illustrate further the importance of discussing what management means by a goal, one of the companies mentioned previously wanted to "isolate and retain all cost savings except those required to maintain a competitive position." While discussing this obvious-sounding goal with his management, the president of this company determined that the pricing formula currently being used automatically passed along any cost reductions to the buyer (since it was a markup-over-cost system); the sales manager was reputed to be the most flagrant price-cutter in the industry; the research director had no idea the company was reputed to be a high-price supplier who "prescribed a Cadillac when a Ford would do the job."

Needless to say, some basic changes were made when these executives tested their operating methods against this goal.

Attack on Integrated Basis

In the normal operation of a business, it is customary to attack problems on a departmental basis. The sales department has its plans and programs, manufacturing has its set, and research and development has still another set. Often this segmented approach to annual planning works out very well, despite its obvious flaws. We are convinced that herein lies a basic difference between the requirements of long-term planning and annual planning. For when you deal entirely in major and basic goals and programs, you cannot successfully follow departmental lines. For example, lowering product costs by 15 per cent is a matter of combined programming and effort by research and development, engineering, production, and accounting. Increased selling effectiveness involves integrated action by engineering, production, purchasing, and sales. Achieving either of these goals requires cooperative and coordinated efforts by each of the functional groups involved. Otherwise, the goal will be more difficult (if not impossible) to achieve in the time allotted.

An example of poorly integrated long-range planning occurred in a company selling highly engineered capital goods. This company had a very fine research and development department that turned out an almost continuous flow of exciting new products. It had an expansion-minded production chief, who was constantly trying to expand facilities to meet the increased demands of these new products. The sales manager was a very able fellow when dealing with technical products and with trained engineers. Unfortunately, many of the new products were sold to new customers, often not engineering-oriented, and reached by agents or other representatives. The capital required to launch these new products far exceeded the company's financial limitations. The resulting mess was characterized by wasted time by research and development, investment in unnecessary facilities based on unrealistic sales forecasts, extreme tightening of capital, and chaos in the sales department. The advent of a new president who was an experienced long-range planner brought a program with entirely different outlines. First, he established criteria, developed jointly by the combined department heads, to guide the development program. These new product criteria required that any prospective new product need not more than $200,000 for launching, be related to present "mainstream" business or be capable of being sold by present agents, and involve no substantial new production skills or facilities.

The president also installed a separate market research group to study market potentials objectively. Finally, the sales department was reorganized to provide for a technical sales group and an agent sales manager to provide separate direction and supervision to each sales unit. Since that time, there have been a number of indications that this company has successfully instituted long-range planning on an integrated basis.

Conversely, a well-integrated attack on a major goal was made by a company that decided to revise its pricing practices to "price each job on the basis of the individual conditions surrounding that job." This required activity in these general areas:

Program	*Responsible Department(s)*
Study and agree on cost base best suited to individual job pricing	Controller
Refine present cost data to determine fixed and variable costs	Controller and Financial Consultant
Develop "bogey" markups for each end-use sales category	Sales
Establish budgeted profits for each end-use category	Sales
Develop standard design specifications	Engineering

This simplified example demonstrates clearly that adequate action toward this goal cannot be implemented by any one department. Nor is it likely that all three departments in the above example would have hit upon their proper contribution in the right time sequence without having worked out these general steps concurrently. Later, as the program was approved, the specific steps required by each department were also detailed. But for the purpose of the long-range plan, these five general steps were adequate to form a sound basis for approval and action.

Gear Job to Executives

We believe strongly that effective long-range planning must be done by the key operating executives of the business. These executives have the intimate knowledge needed to insure reality in the planning, and their participation in goal-setting is essential to promote a common understanding and interpretation of the goals. Moreover, there is no more important activity on which they can spend their time. Our experience indicates that the feeling that most operating executives are poor planners is ill-founded.

Experience also indicates that the chief executive officer of the corporation or the division must play an active role in setting goals and developing programs. During the planning process, other key executives will take from him their cues on participation. Ultimately, his understanding and support are the foundation on which the plan will stand or fall. This does not mean that staff activities cannot provide valuable help to the operating executives. Rather, staff planning in a relative vacuum—that is, not strongly involving operating executives—is usually a waste of time and money. Operating executives must actively participate and assume the major burden for the thinking and the decision-making leading to the final plan.

Relation of Annual Plans to LRP

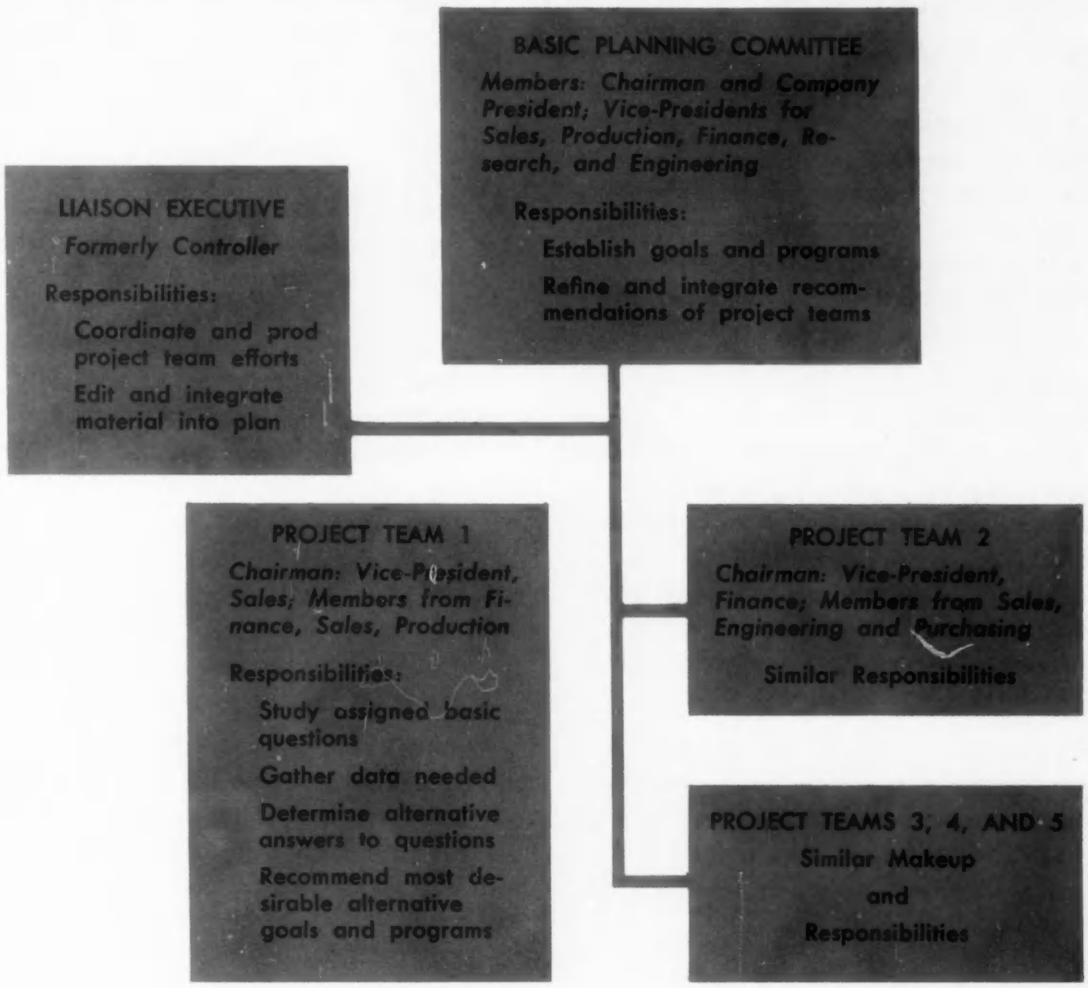
There are surprisingly few basic differences between good annual and long-range planning. Essentially, one is an extension of the other. In points of difference, these three areas stand out:

Time: Short-term plans typically cover one year; long-term plans should extend as far as you can predict realistically (which differs from business to business)

Detail: Annual plans often are very detailed, especially in the financial area; LRP should concentrate on general goals and programs and avoid detailed budgets and projections

Emphasis: Short-term plans often deal with segments of problems and in operating functions (for example, sales and production).

One Successful Version of LRP Organization



Conversely, long-range plans should deal in the over-all business and concentrate on the general requirements for long-term success.

Annual plans should then be made with the LRP as a frame of reference; annual plans can contain either the current year's programs toward the long-range plan or programs not covered in the LRP. But both types of programs should be consistent with the long-range goals. The annual plan then becomes an automatic means of updating and reviewing the long-range plan. Finally, the annual plan becomes the place where the general action programs outlined in the LRP are broken down into specific steps. These specific steps are the basis for assigning deadlines to specific jobs or people in the organization.

PITFALLS TO AVOID

Under any conditions, LRP is time-consuming and laborious. Since it involves key executives, the problem of effective use of time cannot be overemphasized. It is impractical to cover, in this article, all of the byways leading to wasted time, but we can point up what we believe to be the most prevalent pitfalls as a guide to the would-be long-range planner.

1 Excessive fact-gathering. Once the process gets going, most planners have a tendency to overdo rather than to shortchange the process of fact-gathering. There is much to be said for deciding *in advance* what facts to gather, rather than gathering facts to see what answers develop.

For facts, like the opium pipe, can become an obsession, with many side effects but no long-term benefits.

2 Missing deadlines. Deadlines should be established and enforced at each stage in the planning process. Otherwise the plan will never be completed. We have found that a project completed—however roughly—on time is preferable to one that is long delayed. The corollary effect of delay is far more destructive than failure to polish a rough product.

3 Seeking perfection. We have found that the normal human drive toward perfection is another mortal enemy of effective long-range planning. Deadlines are missed, decisions delayed or confidence shattered because certain facts are not available. Make assumptions when necessary, and move toward an imperfect end product. Then go back and polish up the key areas.

4 Committee meetings. Integrated planning usually involves group meetings, most of which are pointless and frustrating. Advance preparation, limited debate, and strong leadership can help minimize this pitfall.

5 Oversophistication. High-quality long-range planning is not the same in every company. One would expect much greater sophistication from a company like Du Pont or General Electric than from a company that doesn't even make formal annual plans. To avoid offering a stock approach, we purposely did not include a format for long-range planning. Some companies are perfectly capable of dealing in economic indexes like GNP, population trends, and the like. Others would merely be confused and discouraged by the mention of cyclical, economic, and technological trends. But both types of companies can and do make effective long-range plans.

Thus, we believe that it is unwise, if not downright impractical, to try to apply a complex of new considerations, such as the life-cycle theory, cost-of-living indexes, and so on, unless these are normal considerations in your business.

Formalized long-range planning need not and should not be a fruitless attempt to predict the future. It should be, instead, a blueprint for transposing your business from its present status to another status—largely of your own choosing.

THE largest library in disorder is not so useful as a smaller but orderly one; in the same way the greatest amount of knowledge, if it has not been worked out in one's own mind, is of less value than a much smaller amount that has been fully considered. For it is only when a man combines what he knows from all sides, and compares one truth with another, that he completely realizes his own knowledge and gets it into his own power.

—*Schopenhauer*

"Thinking for Oneself"

Hawaii—Island Paradise with Economic Potential

Thomas K. Hitch

Many people on the U.S. mainland know at least one facet of the Hawaiian economy. Sears, Roebuck and Co. knows that the Honolulu store does more business than 95 per cent of its mainland outlets. The American Society of Travel Agents knows that, next to Europe, more people think of Hawaii as their "dream vacation" destination than any other place in the world. The Secretary of Agriculture knows that Hawaii produces nearly one-fourth of the American domestic sugar crop and pays its field workers four times as much as Puerto Rico. The American Telephone & Telegraph Co. knows that more telephone calls are transmitted over the Honolulu-California circuit than between any other two overseas points in the world. The fruit and juice industry knows that Hawaii produces over 80 per cent of the pineapples and pineapple juice consumed in the country.

Mr. Hitch, Director of Research, Hawaii Employers Council, is a former member of the staff of the Council of Economic Advisers.

These few facts make it evident that Hawaii is more than the balmy, tropical South Seas paradise of song and story. A careful look at her economy will show it to be modern, diversified, and growing.

The attention that Hawaii will receive when she is admitted as the fiftieth state makes it timely for Americans who scan the business horizon to take a good look at an area which, despite its small size, has total personal income greater than seven mainland states, and per capita personal income greater than half the states.

A QUICK LOOK AT HISTORY

The ships that followed Magellan across the Pacific Ocean failed to discover Hawaii until 1778, when Captain Cook found the islands populated by an estimated 300,000 natives, whose ancestors had settled this furthermost outpost of Polynesia during the thirteenth and fourteenth centuries. The native government was monarchial; all the islands were united under King Kamehameha I by about 1820

when the first significant group of settlers—Congregational missionaries—began to arrive.

Hawaii, as she moved from a primitive society to an incorporated territory of the United States in the nineteenth century, embraced

- A government that was changed from a monarchy to a republic just prior to affiliation with the United States
- A society that was strongly influenced by the missionaries, who largely dominated the culture
- A population that was nearly decimated by Western diseases to which it had no immunity (falling to an estimated 58,000 in 1878, and requiring the importation of foreign labor from China in 1852 and later from Korea, Japan, Puerto Rico, the Azores, Madeira, the Philippines, not to mention America and Western Europe)
- An economy whose base was constantly shifting (exporting sandalwood to China in early years, provisioning the great Pacific whaling fleet in the 1830's and 1840's, supplying many of California's needs in Gold Rush and Civil War days, and finally depending more and more on agriculture after the U.S. Civil War)

The twentieth century prior to World War II found Hawaii a quiet, semitropical community supported largely by sugar and pineapple production but augmented by some tourist trade, some defense activity located around Pearl Harbor, and some services provided to carriers crossing the Pacific. World War II changed this picture with dramatic suddenness, when over half a million troops were temporarily stationed on the various islands, and 75,000 civilian employees of the government were engaged in defense activity. The postwar adjustment of Hawaii from a military camp to a modern society and economy, in contrast to prewar plantation days, has been a massive, and on the whole, successful one.

GEOGRAPHY AND RESOURCES

Looking ahead, one can best grasp the medium- and long-range economic probabilities for Hawaii by analyzing what its resources are, what its people have been able to do with them to date, and how these resources lend themselves to further development in our business and technical world.

Size

A striking fact about Hawaii is its modest size. The 6,435 square miles of land make it about the size of Connecticut, while a 576,000 civilian population and a $1 billion personal income are close to New Hampshire's. In area, population, and income, Hawaii is therefore comparable to a medium-sized New England state.[1]

But despite its lack of stature when measured by some yardsticks, Hawaii has made social, economic, and military contributions to American life out of all proportion to its size.

Location

Hawaii's location has made this possible. The seven populated islands that make up the Hawaiian chain are mountain tops rising from one of the deepest sections of the Pacific Ocean about 2,100 nautical miles southwest of—or 8½ hours' propeller (4½ hours' jet) plane ride from—San Francisco. Strategically placed between San Francisco and Tokyo, and between Sidney and Fairbanks, Hawaii is a significant spot in the vast expanse of the largest ocean in the world. With its northernmost populated island of Kauai on a latitude about 3 degrees south of Key West, the Hawaiian chain lies within the northern margin of the tropics in a position similar to Cuba. However, water from the Bering Sea lowers the temperature of the surrounding ocean to some 10 degrees below that of other regions of the

[1] For Texans and Alaskans: While the seven inhabited islands in the Hawaiian chain are grouped close to each other, the legal jurisdiction of the City and County of Honolulu includes Palmyra (960 miles to the south) and a string of uninhabited islands to the northwest, including Hermes Reef near Midway (1,100 miles from Honolulu). The triangle formed by Hermes Reef, Honolulu, and Palmyra encompasses 540,000 square miles—over twice the size of Texas.

same latitude, and the persistent trade winds from the northeast keep the air temperature down to a summer average of 78 degrees and a winter average of 72 degrees. Thus, while the land yields abundant and year-round vegetation, its inhabitants can live and work free from the energy-divesting heat afflicting many a tropical community.

Because of this location, Hawaii has become the crossroads of the Pacific, the center of American defense activity for the entire Pacific basin, the most accessible subtropical vacationland for the traveling American public, and one of the few parts of the United States where subtropical agriculture can thrive.

Another aspect of Hawaii's location should be mentioned. Lying off the West Coast, her economic and social ties have been largely with California. At one time, the Los Angeles Chamber of Commerce maintained a branch office in Honolulu, and to many residents of the islands, the bay area of San Francisco is a home away from home. The West Coast, for many years the fastest growing part of the nation in people, income, and industry, has been a steadily increasing market for Hawaii's products, as well as for its vacation opportunities.

Land

Because the islands are mountainous, the trade winds are forced to rise and precipitate their moisture, thereby giving most parts of the islands adequate rainfall. There are not only wide variations in scenery, but also wide variations in climate, from warm, coastal leeward areas to cool climates at elevations of 2,000 feet and above. Although only 10 per cent of the land is arable, the combination of sun, rain, land temperature, and air temperature makes agriculture, whether growing sugar or pineapple on a 24-month cycle or alfalfa on a 1-month cycle, highly productive.

Water and Harbors

Since adequate water is essential, the unique water supply on Oahu, Hawaii's most populous island, is worth describing. The combination of porous soil and heavy rainfall in the mountainous and forested interior of the island permits the accumulation of large bodies of fresh water at sea level under the interior of the island. Since the island is surrounded by an impenetrable cap rock at sea level, this fresh water is unable to escape to the sea and rests instead as a lens on top of the salt water. From this great pool, known as the Ghyven-Hertzberg lens, stations in various parts of the island pump over 50 million gallons of water daily to maintain the population and the industries on the island of Oahu. If Oahu were like most island areas of the world, which depend on tin roofs and water barrels for their water supply, it could never support the population and industry that it does.

Another physical item worth noting is that each major island has an adequate harbor and port. Oahu has not only the Honolulu harbor but also the great inlet and estuary forming Pearl Harbor, the major naval base of the Pacific.

Other Resource Potentials

Until recent years it had been presumed that Hawaii's land was suitable only for agricultural purposes. However, it has now been found that Hawaii has sizable quantities of bauxite, titanium, pumice, and clay—all of which promise to be economically exploitable in time.

Population Composition

Before turning to what Hawaii's people have been able to do with these resources, one should understand the composition of Hawaii's population. Populated largely by immigrants from many eastern and western countries, Hawaii is one of the true melting pots of the world. Since this migration took place mainly between 1850 and 1915, except for a continuing inflow and outflow of U.S. mainlanders, the "Chinese," "Japanese," and "Portuguese" who live here are from second to fifth generation inhabitants who have been educated in American schools, grown up under American political institutions, and indoctrinated in the American way of life.

Furthermore, classification of Hawaii's population by racial ancestry is becoming about as meaningless as classifying the mainland population by national ancestry. For 50 years, approximately one out of three marriages in Hawaii has been an "out-marriage," and while some groups (notably Caucasian females and Japanese males) have low out-marriage rates, the interracial mixture that has resulted makes Hawaii's population extremely cosmopolitan.

Whether because of out-marriages, or because of the absence of any one numerically dominant race, or because of the Christian spirit infused by the early missionaries, or because of the equable climate that calms the spirit, the fact is that this heterogeneous mixture of people has learned to live together as a social whole better than any other mixed group in the world. While other parts of our nation are still torn by segregation issues, Hawaii offers a splendid example of racial harmony.

Sociologists consider the island community a "twenty-first century society."

Political Heritage

Hawaii's people have never been "colonials." They have always been free and independent politically, and this is equally true economically. People who have come to the islands have come to live and make their homes, not to exploit and leave. The fact that many of the early missionaries came to Hawaii to do good and ended up by doing well is beside the point; they, like their followers from Scotland, Japan, England, and China, came to live. Foreign capital and absentee ownership have never played a significant role in Hawaii's development. Hawaii has historically earned more from foreign investments than it has sent out of the territory in interest and profit payments.

BASIC INDUSTRIES

Military Defense

The biggest single source of income and employment in Hawaii is military defense, and this has been true since December 7, 1941. The headquarters of CincPac is in Hawaii, with Admiral Felt's command stretching from the West Coast to the Indian Ocean and from the North Pole to the South Pole. Although most of the uniformed and civilian employees are scattered over the Pacific basin, well over 50,000 naval, army, and air force personnel and approximately 25,000 defense department civilians are in Hawaii. This means that the federal government spends over $300 million a year in the pay of uniformed and civilian employees and in the purchase of innumerable goods and services.

This dependence upon the state of international tensions in the Pacific makes Hawaii more vulnerable to changes in international climate than most areas of the country, but since the military build-up at the time of the Korean War, the military establishment has been remarkably stable. Furthermore, despite its size, defense department employment represents only one-eighth of the employed civilian labor force.

Sugar

The biggest segment of the nonmilitary economy is, as most people know, the sugar industry. With some 17,000 employees, Hawaii's 27 sugar companies produce about $145 million worth of raw sugar a year. The outstanding characteristics of the industry are continuous year-round nonseasonal operations, stability of employment, and a productivity both of labor and of land that is unmatched in any other sugar-producing area. The ability to produce ten tons of sugar per acre is the result of a remarkably high degree of mechanization and chemicalization, together with efficient management and vast amounts of research to develop better cane varieties and improved cultural practices.

It is generally presumed that Hawaii's sugar industry will continue to meet the competition of Western beet producers and mainland cane producers, and that the Sugar Act controls will continue to permit the production of

1 million-plus tons per year. It is also known that certain new by-product developments, mainly the conversion of sugar cane pulp into paper, are on the immediate horizon. What is not known is the impact of sucro-chemistry on Hawaiian sugar production. Should sugar play the role in the future that coal tar has played in the past, the entire sugar industry of Hawaii may find an unexpected basis for expansion.

Pineapple

Hawaii's second great agricultural industry is, of course, pineapple, with an annual production valued at more than $115 million based on the sale of some 30 million cases of fruit and juice. Pineapple production, like sugar, is best described as "industrialized agriculture" because of the high degree of mechanization. Being more seasonal in nature, employment in the industry ranges from a high of nearly 20,000 in the third quarter of the year to about 10,000 during the fall, winter, and spring.

Tourist Trade

Hawaii's third great private "industry" is the complex of service activities that cater to the tourist trade. Year by year since the end of World War II, the number of visitors coming to Hawaii has risen by 20-25 per cent, meaning a doubling every four years. In 1957, nearly 170,000 visitors vacationed here and, not counting their transportation costs, spent nearly $80 million. This provides employment for an estimated 8,000 workers.

There is every reason to believe that past rates of growth of tourism in Hawaii will be equalled if not exceeded in the years ahead. Jet aircraft development, the growing interest in the Pacific world, the continuing rapid growth of overseas travel by Americans and Canadians, and the decline in air fares all make tourism Hawaii's economic activity with the greatest growth potential. Hawaii supports a sizable advertising and promotion effort, which is jointly financed by private business and the government, and the legislature has created a Territorial Planning Office to assist in planning the development of tourist facilities in an orderly fashion.

Diversified Agriculture

Two other areas of potential economic growth should not be overlooked. Aside from sugar and pineapple, Hawaii's "diversified" agriculture amounts in aggregate to $50 million of produce per year, with beef, milk, vegetables, coffee, pork, eggs, and flowers the main items. But newer products, such as passion fruit, macadamia nuts, guava products, and papaya give promise of finding sizable export markets in time.

Diversified Manufacturing

The last basic industry of the islands is what is called locally "diversified" manufacturing, to distinguish these manufacturing activities from sugar milling and pineapple canning. While much of this manufacturing activity consists of processing agricultural products or fish, there are at least two industries that have grown to sizable proportions in the last few years—garment manufacturing and furniture making.

Garment manufacturing, like many Hawaiian economic activities, is based on exploiting for the American market those items that are uniquely Hawaiian—in this case its fashions, outdoor way of life, and blend of East-West cultures. Sports and leisure clothes of all types, not just the blatant aloha shirt, have found ready acceptance across the mainland.

Furniture manufacturing, on the other hand, is based on the advantage the local producer has when producing for the local market. Freight costs of imports are such that local producers are capitalizing more and more on the advantage of being adjacent to a market of over a half million people.

Hawaii has long recognized the growth potential of both diversified agriculture and diversified manufacturing. As long ago as 1949, the territorial government created an Industrial Research Advisory Council, which spent over a million dollars in agricultural and industrial research before it was succeeded by the larger and more ambitious Territorial Economic Planning and Coordination Authority.

Hawaii's basic income-producing industries

and services so far discussed provide employment for approximately 80,000 civilians. The rest of the employed labor force, another 120,000, find employment in trade, service, construction, public utilities, local government, and finance.

Construction

Hawaii is experiencing at the moment a sizable construction boom that is, however, the result of a number of major, isolated projects getting under way in 1958, rather than a reflection of sustained growth in this field. The combination of a $100 million Capehart housing program, a $50 million Standard Oil refinery, and a $16 million shopping center development has caused the annual volume of construction to rise from a normal level of about $100 million to an anticipated $180 million in 1958.

EXPANSION OPPORTUNITIES

The alert stateside businessman looking at the Hawaiian economy would inevitably ask such questions as:

How stable is the Hawaiian economy?
What are the opportunities for expansion?
To what extent does radical trade unionism block economic progress?

While none of these questions can be answered with finality, they deserve treatment in any over-all review of Hawaii.

Business Stability

No area of the country can claim immunity from economic fluctuations, but Hawaii is relatively recession-proof. This can be seen by glancing back over the foregoing listing of the six major income-producing activities. The activities of the defense department in Hawaii are the product of international relations in general and the strategic plans of the Joint Chiefs of Staff in particular, and are unrelated to the index of industrial production or the rediscount rate. The two biggest private industries, the growing and processing of sugar and pineapple, sell almost exclusively to the mainland market; if that market deteriorates it may mean lower prices and lower profits but not reduced production. Crops that take two years to produce, as do both sugar and pineapple, will not be plowed under or expanded in response to short-range economic fluctuations; hence the recession market of 1958 has had no impact on employment in agriculture. Since most diversified manufacturing and agriculture are producing for the local market, production and employment in these industries are sustained as long as the local market holds up.

Only in the case of tourism does a mainland recession make itself felt in Hawaii, but the secular growth in Hawaii's tourist business is so great that the 1958 recession has simply caused the tourist business to level off at peak capacity, rather than to decline. Even here the impact is diverse, with the recession hurting the winter business much more than the summer business, largely because the winter visitor tends to be the company president and investor, in contrast to the summer tourist who is more likely the school teacher, the office worker, or the supervisor on a two-weeks' vacation. While a major depression would undoubtedly undermine Hawaii's tourist business, a recession of the 1957-58 variety has only a slight impact.

Economic Opportunities

It is less easy to say what economic expansion opportunities exist for Hawaii. Sugar and pineapple cannot, in all probability, be classified as industries with great growth potential; and the shortage of available arable land would limit such growth even if markets permitted it. Defense activities, we hope, will not have to be expanded.

However, tourism should overtake pineapple in a few more years and surpass sugar in less than a decade. Here the growth potential is great and well-recognized. Less well-recognized is the possibility of increasing diversified manufacturing and agricultural activities. Such expansion would not only meet

the needs of the 576,000 members of the civilian population but would also meet in part the needs of the military establishments located in Hawaii and throughout the Pacific basin.

In addition, the possibility of expanding exports of both manufactured products and agricultural produce is a real one. Everyone knows that Hawaii's farmers will in time produce more and more to meet the territorial domestic and military needs for food. A striking example is the fact that the Navy's local purchases of fresh vegetables have increased tenfold (to a figure in excess of $1 million a year) since 1952. Not overlooked are the possibilities of the exportation of a wide range of subtropical fruits and nuts that either cannot be produced at all on the mainland or cannot be produced nearly as well. Sizable exports of papaya and macadamia nuts have already been achieved, and the potentialities of lilikoi (passion fruit) and other tropical fruits are considered by market analysts to be great.

The expansion of diversified manufacturing activities in Hawaii will undoubtedly be based largely on production for the local civilian and military market, although some items may find a sizable mainland market. Such expansion, therefore, has definite limits, but it is generally agreed that those limits have so far not been approached. The last few years have seen the establishment of new activities in the fields of electronics, plastics, oil refining, textile finishing, meat packing, paint making, galvanizing, and fibre glass production, as well as the growth of such well-established manufacturing activities as furniture making, garment production, wood carving, perfume manufacturing, mattress making, building board production, and food processing.

The mainland businessman who contemplates doing business in Hawaii should know that he will be doing business in a totally modern American community. He will have an educated, and possibly unionized, labor force. He will find government machinery and procedures based on the familiar pattern of mainland states. He will find mature business institutions and well-organized community facilities with high standards of business practice and high standards of work, and he will pay all the familiar taxes. Hawaii therefore does not belong in either the export division or the foreign division of the American corporation that does business there.

The Labor Picture in Hawaii

Finally, does the labor situation in Hawaii, which periodically receives widespread publicity across the mainland, serve as a deterrent to economic growth?

Unionism came to Hawaii a few years later than to the mainland. It was just beginning to be established when Pearl Harbor was bombed, and Hawaii was placed under military government, with very strict labor controls. The accumulation of grievances under these controls, plus the normal impetus toward unionization, led to a sudden mass unionization of Hawaii's basic industries in 1944-46, primarily by Harry Bridges' International Longshoremen's and Warehousemen's Union. This unionization proceeded in an orderly manner, relatively devoid of strikes, lockouts, or incidents. Since then, various AFL-CIO unions, plus the expelled ILWU, have organized sizable segments of Hawaii's production industries, with some penetration into transportation and service industries. Today there are approximately 41,000 union members out of an employed civilian labor force of roughly 200,000, or about one in five in contrast to about one in four for the U.S. as a whole. Unionization is therefore not quite as extensive in Hawaii as on the mainland, particularly in view of the fact that nearly half of all union members in Hawaii are in the sugar and pineapple industries, which are basically agricultural.

More important is the fact that management in Hawaii has been able to retain certain rights of management that have frequently been abandoned under union pressure in other areas. The union shop is relatively rare in Hawaii, and where it exists it frequently is in a

modified form that does not require old nonunion employees to join. The right of employers to discharge employees for failure to perform work as required is recognized in most union contracts. Union control of company operations through the secondary boycott and other illegal (but effective) means has been kept to a minimum. While seniority is a factor in layoffs and promotions, it is generally not the sole consideration.

This situation was achieved, despite having to deal with the very militant and radical ILWU, because Hawaii's employers had a few years of grace in which to profit from the experience of their mainland colleagues. During this period they recognized the need to deal with mass unionism in an organized and professional fashion and created a territory-wide and industry-wide association for that purpose. Individual companies organized their own industrial relations departments and gave union and employee relations a high management priority. Commenting on this situation a few years ago, the Industrial Relations Counselors of New York said:

> "Since World War II in no segment of American industry has there been more rapid and sounder development of general management know-how in the field of relations with employees than in the Hawaiian Islands. Ten years ago very few companies there had formally established industrial relations departments. Today the greater part of the companies in the Islands, including those outside the pineapple and sugar industries, have well established personnel staffs fully manned with as qualified industrial relations people as anywhere in American industry. Not only is this development evidenced by the expansion of headquarters and plant industrial relations staff, but even more important it is characterized by the extent to which the direct line managements on the plantations and in the shops have learned to handle relations with employees and where organized, with union officials at the local level."[2]

Despite this achievement, Hawaii is clearly vulnerable to strikes that affect overseas transportation. Her physical contact with the rest of the world is by ship and by plane, with all goods moving over docks manned by union stevedores. This means that coastside dock strikes, Pacific maritime strikes, or Hawaiian dock strikes can sever this line, as they have on a number of occasions in the past. At Hawaii's end of the line, legislation which permits government operation of the docks in the event of a strike provides some protection, but West Coast dock or maritime strikes can disrupt business in Hawaii.

Although Hawaii to the tourist may be a carefree, tropical Paradise with undertones of native Polynesia in Waikiki and true Polynesia in secluded valleys on the outer islands, it is to the businessman a prosperous (3 to 5 per cent unemployment rate), affluent, modern, progressive, and diversified economy. Since it has been an integral part of the American economic, cultural, and social system for 60 years, it should now take its place as an equal state. It will be called the fiftieth state, but only in chronological sequence will Hawaii ever rank that low.

[2] Ralph O. Beck, Vice-President, Mutual Telephone Company, Honolulu, T. H., "Hawaii: Test Tube of Industrial Relations." An address before the Fall Personnel Conference of the American Management Association, New York City, New York, Sept. 29–Oct. 4, 1952.

IT IS a sail of 2080 miles over the Pacific Ocean, from San Francisco to Honolulu. The stanch steamer will make the passage in about six days. . . . The voyage over the uneasy waste of waters, where ships are seldom met, is not, however, without its peculiar charms. The remarkable cloud scenery is ample compensation for the discomforts of the journey.

—*Alexander S. Twombly*

HAWAII AND ITS PEOPLE: THE LAND OF RAINBOW AND PALM (1900)

What is the industrial potential of Alaska? The surface has been merely scratched.

Alaska—*from* Frontier *to* Forty-ninth State

George W. Rogers

Any attempt to tell "all" about Alaska in a limited space would be futile. By giving only an informal introduction to the forty-ninth state, I may be able to present an adequate picture of Alaska from which to begin investigations; the reader will have to provide such props as a world globe or north polar projection of the world map, and to do some of the follow-up leg work.

PHYSICAL POSITION

Pinpointing Alaska

Look at your globe or map. Alaska is our first noncontiguous state, an "island" of the United States separated by our neighbor, Canada. Anchorage, the largest city of the new state, is approximately 2,500 airline miles from Minneapolis and 1,450 miles from Seattle. Continentally, Alaska is a large peninsula joined to the rest of North America by a land base 600 miles wide between the Arctic and Pacific Oceans along the 141st meridian, and a "Panhandle" running about 400 miles down what would geographically be a part of the British Columbia coast. Further anchors are provided by the extension of the Rocky Mountain system swinging up through Yukon Territory and arching across the top of Alaska as the Brooks Range, and the continuation of the continental Pacific Mountain system through British Columbia and into Alaska as the Panhandle, then into the northwest in two spurs. One runs along the edge of the Gulf of Alaska and makes its final appearance on the map as Kodiak Island, and the second arches farther inland as the Alaska Range (reaching its highest altitude with Mount McKinley's 20,269 feet) and then becomes the spine of the Alaska Peninsula and the Aleutian Islands.

Between these two major mountain systems lies the central plateau, drained by several mighty rivers—the Yukon, Kuskokwim, Porcupine, Tanana, and Koyukuk. In the North Pacific, ocean currents are turned in their northward flow by the barriers of the Aleutian Islands and the Alaskan mainland and flow in a southerly direction down the eastern shore of the ocean to California. The warm, moisture-laden air from this current

George W. Rogers is conducting—for the Arctic Institute of North America—a long-range study of economic factors in the development of Alaska's resources.

condenses into mists and rains as it rises over the coastal mountains and makes possible the perpetuation of the commercially important rain forests and salmon fisheries of the coastal areas. In the interior and arctic, extremely short growing seasons, low precipitation, and predominance of permafrost (permanently frozen ground) make tundra the dominent vegetative cover.

On your map Alaska looks big—it is big. Its total area of 586,400 square miles is 1/5 the total area of the other 48 states together, approximately 2¼ times the area of Texas. It stretches out between the latitudes of 51 degrees and 72 degrees north and the meridians of 130 degrees west and 173 degrees east (approximately the east-west and north-south spread of the other 48 states) and embraces within its boundaries four time zones.

POPULATION

Growth

Most discussions of Alaska comment on the great expansion in population in recent years. In percentage terms, this phenomenon is indeed impressive, but we will deal only in absolute terms, which will mean more to the reader who is attempting to measure Alaska against something within his own experience. The first official U.S. census of Alaska, in 1880, reported 33,426 Alaskans, all but 430 persons being of aboriginal stock (Indians, Aleuts, Eskimos). Over the next 60 years, population gradually rose to a level of 72,524 persons (October 1, 1939), then jumped to 128,643 persons at the first post-World War II census (April 1, 1950). It has risen to an estimated monthly average of 211,000 persons for fiscal year 1957.[1] The 1950 census enumeration represents a population density of only 0.2 persons per square mile of land area as compared with the United States average of 50.7 persons per square mile. Even the 1957 population estimate represents a density of only 0.33 persons per square mile.

Scattered Centers

Another important dimension to the picture of human occupancy of this region is the degree to which the already sparse population is concentrated within a handful of places. The bulk of the civilian population can be quickly located by indicating major towns or cities—those with populations of 1,000 persons or more. Starting at the southernmost tip of the Panhandle and continuing counterclockwise around the coastal regions fronting on the Pacific, these are Ketchikan, Wrangell, Petersburg, Sitka, Juneau, Cordova, Seward, and Kodiak. Nome and Barrow are the only others along the coastline northward up the Bering Sea with populations of more than 1,000. Anchorage and Fairbanks, the only two inland communities in this category, both are on the Alaska Railroad line and are connected to the main highway system. In 1950 these 12 spots on the map, plus the major military installations, accounted for 55.4 per cent of the total population. Probably 70 per cent of the total will be in these places by 1957. Most of this is accounted for by expansion within the "metropolitan" areas of Anchorage and Fairbanks. The rest of the population is scattered among the Indian villages in the Panhandle and the Eskimo centers up the Bering Sea coast and the river basins draining into it.

Seasonality

A final general characteristic of Alaska's population is its high seasonality. A study of monthly population for the calendar years 1950 through 1957 indicates that population at the low month of the year is about 10 per cent below the annual average and at the high month about 10 per cent above the average.[2] Seasonality in employment is even more

[1] *Estimate of Alaska Population, Report No. 6* (Juneau, Alaska: Alaska Resources Development Board in cooperation with Bureau of Vital Statistics, 1958), p. 11. Other population data from reports of the U.S. Bureau of the Census.

[2] *Estimate of Alaska Population, Report No. 6,* pp. 12-15.

marked. Monthly employment in all industries for the same period, the low month of each year, was from 45 to 28 per cent below the annual average, and the high month from 40 to 52 per cent above it.[3]

THE ECONOMY

The Colonial Element

Before World War II, Alaska's economy followed a fairly typical colonial pattern of exploitation and development. External trade during the 1931-40 decade, for example, was reported in one study to have annual average out-shipments totaling $58,758,000, of which the three leading items were canned salmon ($32,582,000), gold and silver ($15,904,000), and furs and skins ($2,607,000). The average annual value of in-shipments ($28,410,000), was less than one-half the value of out-shipments for the same decade, the three leading commodities being tin cans ($5,219,000), petroleum products ($2,679,000), and whiskey and other alcoholic beverages ($1,978,000).[4]

Since 1940, the canned salmon, gold, and fur props of the Alaskan economy have been seriously eroded by overexploitation or changed economic conditions. The packing of canned salmon steadily declined from an annual average for the years 1934-38 of 3,215,000 cases of 48 one-pound cans, to an annual average of 1,011,500 cases for the 1954-57 period. Rising costs have drastically curtailed the mining of gold and silver, and today it is a shadow of its former self (1957 production $7,551,589). Except for the relatively steady output of furs from the Pribilof Islands fur seal herd, which is under the jurisdiction of the federal government, the value of raw furs is now of negligible significance.

Despite this decline in the pre-1940 economic base, Alaska has enjoyed a relatively great population expansion. The answer to this apparent paradox is to be found in the shift to a new and entirely different economic base.

Military Activity

After 1940, Alaska's basic economy became tied to defense activities and defense-related construction. The number of military personnel in Alaska increased from the 524 reported by the 1939 census to a monthly average of 9,000 during fiscal year 1941. The Alaska Employment Security Commission recorded that average monthly covered employment in construction rose from 1,255 workers in 1940 to 10,521 during 1941 as work was rushed on the defense establishment. Military population reached a peak of 152,000 persons during 1943, and with the cessation of hostilities dropped to 18,000 persons in 1946. Covered employment in construction dropped to 1,650 workers per month in 1946. The strange and disturbing years of the Korean conflict, and then the last years of intercontinental missiles and earth satellites resulted in a rapid and sustained recovery. Military population was nearly 50,000 persons for most of the period, and construction employment averaged from 7,000 to 10,000 per month.

New Industries

A new element of stability was added to Alaska's base economy in 1954 when its first pulp mill started operation—the first major "year-round" industry backed by a sustained-yield forest management program. The current oil boom in southcentral Alaska and southeast Alaska's forest products hold promise of future expansion and are reflected in most current discussion of Alaska. However, this new element has not been reflected in the immediate past and, as yet, has had little impact upon the present.

[3] Population lows were January, 1950-54, and December, 1955-57. Population high was July, 1950-57. Employment lows were February, 1950, 1955, 1957, and January, 1951-54, and 1956. Employment highs were August, 1950-51, and July, 1952-57. *Financing Alaska's Employment Security Program*, Vol. II (Juneau, Alaska: Alaska Employment Security Commission, 1958), 15.

[4] J. L. Fisher, *External Trade of Alaska, 1931-1940* (Portland, Oregon: National Resources Planning Board, 1943), pp. 15, 20.

Areas of Employment

Statistics describing the Alaskan economy of today in terms of its external trade are not available, but even if they were actually would not tell the whole story. A tabulation of the total employed labor forces for 1956-57 indicated that, of a monthly average of 110,437 persons employed, government employment accounted for 60.3 per cent of total employment (military 42.3 per cent, civilian government 18 per cent) and private employment only 39.7 per cent. In the private sector, self-employment and unpaid family workers (mostly persons engaged in fishing, hunting and trapping, and some shopkeepers and professional people) constituted 12.1 per cent of the total employed labor force, and private wage and salary workers made up 27.6 per cent.[5]

The Alaska Employment Security Commission records of monthly employment can be taken as a fairly accurate index of the industrial composition of the private wage and salary workers.[6] During 1956 and 1957, the construction industry accounted for 22.1 per cent of covered employment, salmon canning 9.0 per cent, mining 4.2 per cent, lumber 2.5 per cent, pulp 2.1 per cent, all other manufacturing 2.7 per cent. Those industries sometimes referred to by economists as "tertiary industries" (transportation, communications, public utilities, trade, finance, insurance, real estate, services) constituted 56 per cent of totaled covered employment.

THE LOOK OF ALASKA

"The Last Frontier"

What is Alaska? The physical geographer could describe it simply as the largest peninsula on the North American continent. If that did not suffice, he could present fascinating discussions of its rich variety of land forms, geologic origins, and so forth.[7]

This, however, is not the definition the questioner normally has in mind. We have long been accustomed to hearing it labeled as "The Last Frontier," but this is certainly not an accurate definition of Alaska in an age in which transportation and communication technology has made possible the movement of people and investment into other vast empty regions of the earth (interior Brazil, Africa, Siberia, and others).

Colonialism

In the long fight for statehood, it was characterized as a colony of certain "stateside" interests and federal bureaucracy—not without some justification.[8] The pattern of natural resource exploitation, the cultural conflicts between nonindigenous and indigenous peoples, absentee investment and control of the means of production, impermanence and instability of the nonindigenous population—all these characteristics and others are typical of many colonial situations.

However, if Alaska's situation represents colonialism, it is a strange colonialism with such marked differences as public rather than private ownership of virtually all of the land and natural resources. It is a "colonialism" that attempts to apply all of the tax programs of a mature and strong industrial economy and provide all of the aspects of the welfare state common to a highly urbanized, populated, and industrialized society.

[5] *Financing Alaska's Employment Security Program*, p. 19. Other statistical references following are from this volume and Vol. III.

[6] Because the Act applies to all firms employing one or more persons, the coverage has been unusually complete. It is estimated in the preceding study that "uncovered" employment is only a little more than 1 per cent of the total private wage and salary workers.

[7] See Howel Williams, ed., *Landscapes of Alaska* (Berkeley: University of California Press, 1958).

[8] This theme has been most fully developed by former governor Ernest Gruening in his latest book, *The State of Alaska* (New York: Random House, 1954), and elsewhere, as in his pamphlet entitled *Let Us End American Colonialism*, published by Alaska Statehood Committee in 1955.

Statehood

To the average American, Alaska is the forty-ninth state. To those who have lived in Alaska for a number of years, however, there is a large gap between being a "sovereign state" in name and in being one in fact. What little has been presented here of Alaska's population and economic development is ample to demonstrate that there is a long way to go before this is accomplished. In relation to the millions of dollars spent on programs designed to foster development, the results achieved to date are very disappointing and in any case appear to derive from the even larger sums spent on the defense establishment. Aside from the recent start on forest products industries, the trend in development of natural resources has all been downhill for the past two decades. Alaska's development has taken place in a few narrowly specialized starts and stops, and for all practical purposes has not really begun.

Alaska is not something that is or has been; it is a promising potential of something that can be. It is not necessary to recite the inventory of natural resources; that has been dinned into the reader of newspapers and news magazines before and since the passage of the Alaska Statehood Act. In a region as large and varied, there is bound to be a little of almost everything, and a lot of some things. It is more important to ask who wants these resources and where are they located.

ALASKA'S POTENTIAL

Resource Plus Location

Most thinking on Alaska's future role as a state of the Union is at the same stage as thinking regarding its position in the nation's defense prior to World War II. A report of the National Resources Committee on December, 1937, reflected the general attitude of the War Department and the Navy Department. Alaska was merely a distant and difficult-to-defend outpost of possible minor value in the event of war and an uncertain and costly source of a few strategic raw materials. The only military forces in the territory on June 30, 1937, were 298 infantrymen and officers at Chilkoot Barracks, who were located so as to serve only as a means of fighting off an invasion from Yukon Territory; and 134 men and officers of the Army Signal Corps. The "local defense" of Alaska was one of the extra assignments of the U.S. Pacific Fleet.[9]

The October 1, 1939, census reported only 524 military personnel in Alaska. Despite the preaching of "Billy" Mitchell and other early prophets of the new air age, it was not until the onset of World War II and the actual invasion and occupation of United States soil that it became generally accepted that, instead of a defense liability, Alaska's strategic location in relation to the Pacific and Arctic Oceans and the land masses constituting their farther shores made it a principal bulwark of defense for the entire North American continent.

We must similarly get our thinking on Alaska's natural resources development into a more realistic new focus. Most public policy and private investment discussion about Alaska today uses the same outmoded perspective of the military discussions of the late 1930's. Alaska possesses natural resources, but it is remote in space from home markets and from this point of view is economically a marginal area of only remote future interest as a source of supply.

North to the Orient

When our general westward continental movement halted on the shores of the Pacific, some of our business and philanthropic enterprises began to reach across this vast body of water to the shores of Asia. Because of the shape of the globe, the shortest route to the Orient appears on our Mercator projection

[9] National Resources Committee, *Regional Planning, Part VII, Alaska—Its Resources and Development* (Washington: U.S. Gov't Printing Office, 1938), pp. 18-19, 205-6.

maps as a great curved line following the general arc of the southern shore lines of Alaska—the Great Circle Route—and this was the route by which our westward movement continued.

This elementary fact of life has played an important part in the postwar plans of Japan, seeking to find replacements for its lost sources of natural resources. Japanese interests have already established an important forest products industry in Alaska—a large sawmill operation at Wrangell and a $52,500,000 high-alpha pulp mill at Sitka—and have been actively investigating the feasibility of developing coal and iron ore deposits for their heavy industries. Most Americans are probably not aware of the extent to which Alaska is becoming one of the principal bridges between the rest of the states and the other side of the Pacific world.

North to Europe

A number of years ago, Vilhjalmur Stefansson suggested that the Arctic Ocean would one day become the Mediterranean of the world of the future, and when this happened Alaska would be our means of access to this new "center of the world." This day may well be at hand, for it has now become commonplace for commercial flights to and from the Orient and the continental United States to stop in Alaska en route to and from Europe. The feasibility of travel under the polar ice cap to Europe has been demonstrated, and with it comes the future possibility of bulk transport via this route. Even before this becomes an actuality, many Alaskans are looking hopefully to the opening of the St. Lawrence Seaway, which, linked with the transcontinental Canadian rail lines terminating at Prince Rupert, might be the means of making relatively inexpensive bulk movements of Alaska's raw materials to the hungry workshops of western Europe.

It is easy to speculate about how Alaska could be the means of assuring the United States of having the best of two worlds—the new world of the Pacific and the old world of the Atlantic. This is Alaska's potential—what it can mean to its sister states in the future.

SUGGESTIONS TO PROSPECTORS

THOSE WHO go to Alaska should take sufficient supplies for at least one year. . . . To meet all the necessary expenses of the trip and take one year's outfit, at least $500 is necessary . . . Sending home for money is a very uncertain thing for several reasons, one of which is the unreliable mail and express service. The present rates of fare charged from Seattle to Dyea and Skagway are $40 first-class and $25 steerage. To Dawson City the fare is usually about $150 . . .

While passing over the Summit in winter is considered a hazardous undertaking, yet, if attempted at the proper time, it can be made with as much safety as at any other season of the year. Do not attempt to cross the Summit unless there is every indication that there will be no wind . . . The experienced traveller will camp whenever the conditions for travelling are unfavorable and remain there contented, even though it be for days at a time. A good rule to follow is, if one cannot comfortably make ten miles a day, make five, and if five cannot be made, make one, and before a person is conscious of the passing of time, he is at the end of his journey.

—*Miner Bruce*
ALASKA (1899)

Achievement of dynamic goals may depend upon a relatively large managerial organization.

Managerial Overhead:

HANDLE WITH CARE

C. Edward Weber

Managerial overhead is a delicate issue in many firms. Public company statements often ignore this item except, of course, for the compensation of top executives, and managerial overhead usually remains unidentified—if not concealed—in the larger administrative and sales figure. Although companies are reluctant to discuss the extent of managerial overhead with outsiders, they seem to be concerned and do make sporadic efforts to impose arbitrary limits or across-the-board cuts.

Such limits or cuts will not be practical if there has been no consideration of the reasons for changes in the cost of management. Effective control must be based on the understanding of the problem being controlled; in this case, the understanding must encompass explanations for the number of and compensation to managerial personnel. The problem, accordingly, is a serious one. I will point out some reasons for changes in the size of managerial personnel as compared with total company personnel and suggest an approach for controlling the number. (Managerial personnel may be defined as those persons in the line organization, from supervisors to executive officers, and those persons in the staff organizations with equivalent status.)

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GROWTH OF MANAGEMENT

Studies by the Industrial Relations Section of Princeton University showed that a variety of companies have recently had dramatic increases in their managerial organizations.[1] However, not all of the Princeton studies indicated such sizable increases. In one instance,

[1] The Industrial Relations Section of Princeton University is currently analyzing 50 cases. This study, directed by Frederick H. Harbison, is being written by Samuel E. Hill and the staff of the Industrial Relations Section. For the pilot study of this problem, see C. Edward Weber, "Managerial Growth and Development: A Tentative Explanation of the Increasing Use of Managerial Manpower in Comparison to Total Manpower," unpublished Ph.D. dissertation, Princeton University, 1957.

The Rise of the Managerial Organization

DRAMATIC increases in the size of managerial personnel are not uncommon. Five companies with such increases, taken from a study by the Industrial Relations Section of Princeton University, are listed in the table below. Managerial employment expanded by 734 persons between 1948 and 1955 in the integrated petroleum company and by 288 in the industrial chemical company.

The surge in managerial growth may be part of a long-term trend that became noticeable at the turn of the century. The increase in combined managerial, sales, and clerical help in the five companies is compared with that in total U.S. industry since 1899. A significant share of this increase undoubtedly can be attributed to management alone, since the history of business organizations has been one of specializing and extending managerial activities.

. . . in Five Companies

(Managerial Personnel as a Percentage of Total Company Employment)

Kind of Company	1947	1948	1949	1955
Integrated petroleum		17.7		22.4
Petroleum refining			13.1	16.0
Industrial chemical	15.5			20.7
Food processing	4.8			6.9
Textile and paper specialties (affiliate)	8.9			13.6

. . . and Since 1899

(Managerial, Clerical, and Sales as a Percentage of Hourly Employment in Five Companies Compared with Total U.S. Manufacturing)

Kind of Company	1899	1947	1948	1949	1955
Total U.S. manufacturing	7.7	21.6			
Integrated petroleum			67.5		87.7
Petroleum refining				66.2	72.8
Industrial chemical		76.3			91.8
Food processing		25.4			33.6
Textile and paper specialties (affiliate)		25.4			33.6

SOURCE: *The figures on U.S. manufacturing industry were obtained from Reinhard Bendix,* WORK AND AUTHORITY IN INDUSTRY: IDEOLOGIES OF MANAGEMENT IN THE COURSE OF INDUSTRIALIZATION *(New York: John Wiley & Sons, Inc., 1956), p. 214. The remaining figures were obtained from C. Edward Weber, "Managerial Growth and Development: A Tentative Explanation of the Increasing Use of Managerial Manpower in Comparison to Total Manpower," unpublished Ph.D. dissertation, Princeton University, 1957, p. 25.*

a steel company came close to having a stable ratio of "chiefs" to "Indians." Managerial employment in the company expanded by 35 persons between 1946 and 1955 and rose from 11.6 per cent to 12.2 per cent of company employment.

This recent managerial growth may be part of a long-term trend. Several excellent studies indicate that combined managerial, sales, and clerical help have taken over an increasingly large proportion of all hourly employment in manufacturing since the turn of the century.[2] Perhaps a significant share of this relative increase can be attributed to management alone, since the history of business organization has been one of specializing and extending managerial activities.

The problem of controlling managerial overhead must be considered within the context of what may be a long-term and pervasive

[2] Seymour Melman, "The Rise of Administrative Overhead in the Manufacturing Industries of the United States, 1899-1947," *Oxford Economic Papers* (New Series), III (February, 1951), 62-112, and Reinhard Bendix, *Work and Authority in Industry: Ideologies of Management in the Course of Industrialization* (New York: John Wiley & Sons, Inc., 1956), pp. 211-26. Melman analyzes the growth in the United States, and Bendix compares administrative growth in several countries.

rise in the managerial proportion. An individual firm may find that there are strong influences over which it has little control. The relative size of management may be as dependent upon conditions permeating the economy as upon the staffing decisions of the firm. To the extent that this is true, arbitrary across-the-board cuts in personnel will necessarily be short-lived.

REASONS FOR INCREASE

Empire Building

The obvious explanation for the increased number of managerial personnel seems to be the elaboration and extension of their functions—managing risk, planning and innovation, coordination, administration and control, and routine supervision. In other words, it appears more plausible that the phenomenon is attributable to an increase in work rather than to a decline in managerial effort. The problem is this: Is the extra work worth while? Perhaps the activities are added as a result of empire building. Vice-presidents in charge of personnel, supervisors of quality control, and chiefs of other organizational units may expand their activities to increase their prestige. A large staff or elongated chain of command may make the chief feel that he is a great man. Presented with a problem, he may select a solution that enlarges his organization rather than the solution that is most economical.

Empire building can induce spiraling costs if each great man strives to enhance his relative stature by building a managerial organization that is bigger than those of his rivals. Other pressures may also be generated for continued expansion. A proliferation of memoranda, committee meetings, and other devices for communication is likely to arise out of the efforts to integrate and coordinate the additional activity. The proliferation may then necessitate the subdivision of managerial jobs.

These and other variations of the empire building theme are so persistent and so generally accepted that they cannot be dismissed. There is every indication that empire building does exist and that it is a powerful force in some instances. But can we say that it is generally a dominant force underlying the growth of management?

The Drive for Prestige. In my judgment, the notion that there is a necessary relationship between the desire for prestige and empire building is a tenuous one. Relative prestige among managerial personnel is derived, I suggest, from their influence in decision-making. This seems to me to be the source of a manager's standing. The person who is able to extend his influence over more vital activities is gaining a stronger voice in the leadership of the enterprise. His stature within the organization must increase, because leadership of the enterprise is the essence of the managerial functions. The emphasis is on authority over activity rather than over people. For example, the management of sales includes discovering markets and developing an effective approach to advertising as well as directing the sales force; developing new markets and advertising approaches may be far more critical than directing the sales force.

Such things as the size of the office, its location, and the quality of secretarial service are only the symbols of prestige. In some instances, the number of managerial subordinates may also be a symbol of prestige, but the chief is not compelled to add subordinates to gain prestige. The additional staff would be merely a demonstration of the standing already gained.

The gaining of authority over more vital activities may sometimes lead to an increase in the number of subordinates for reasons other than empire building. The profit and loss potential is greater in more vital decision-making areas; as a result, there is a greater incentive to plan and control these activities more carefully. Additional staff work, however, can only result in a more effective decision if the state of knowledge in that area is sufficiently developed. The number of subordinates is as much dependent upon the knowledge of how to solve the problem as upon the importance of the problem. It is not surprising, therefore, to

find more staff work being devoted to the less vital than to the more vital activities.

A Universal Symbol?

Empire building may still be a strong motivating force even though chiefs—whether supervisors or executive officers—are not compelled to gain prestige by building empires. Relatively large organizations, in other words, may be widely valued symbols of prestige. If this is the case, we would expect to find that the relative size of the organization corresponds to the importance of the top man. Such is not the case, to my knowledge, but it is a matter needing systematic study. I suspect that the "organization man" does not locate influential people by counting subordinates.

I would suggest in summary that the prestige of the chief is not derived from the size of his organization and that the size of the organization is not associated usually with effort to display prestige. On the other hand, empire building cannot be dismissed since the relative size of departments may be a highly valued symbol in particular organizations.

Company Size

More extensive company operations are sometimes offered as the reason for larger managerial organizations. Further study of this problem is needed, but the available evidence suggests that company size is not a determining factor in the ratio of managerial personnel to other personnel.[3] The more intensive use of specialized services, which is possible in larger organizations, apparently outweighs the greater difficulties in administering larger organizations. Furthermore, greater administrative difficulties do not necessarily result from an expansion in the organization—at least as measured by output.

Technology

The ratio of chiefs to Indians appears to be higher in capital-intensive industries. One may argue on the basis of this association that managerial overhead is dependent on the level of technology. Certainly, different technologies require different mixes of managerial and other human resources, but the critical question is whether technological advance requires a greater ratio of managerial to total company personnel.

There is no final answer to this question, but the evidence suggests that technological advance does not regulate the ratio of line and staff management to the rank and file. In recent studies, comparisons made between technological development and the administrative ratio for U.S. manufacturing industries[4] showed that increases in the administrative ratio did not correspond to increases in labor productivity or the use of horsepower; and that industries noted for mechanization did not account for the over-all rise in the ratio for manufacturing. These comparisons are rough because they lump clerical with managerial employment and because labor productivity and horsepower inadequately measure technological advance; yet the comparisons are indicative.

Further evidence can be obtained from two

[3] Aggregate figures for the United States and for Germany indicate that the combined ratio of clerical and managerial personnel has been smaller for larger organizations. See Melman, "The Rise of Administrative Overhead in the Manufacturing Industries of the United States," pp. 74-75; Seymour Melman, "Production and Administration Cost in Relation to Size of Firms," *Applied Statistics*, III, 1 (Reprint, 1954), 7-9; and Bendix, *Work and Authority in Industry*, pp. 221-22. For analyses reaching different conclusions, see Robert D. Loken and Winfield C. J. Thake, "How Many Managers Are There?" *Current Economic Comment*, XIV (November, 1952), 18-27; and Alton W. Baker and Ralph C. Davis, *Ratios of Staff to Line Employees and Stages of Differentiation of Staff Functions: A Study of Ohio Manufacturing Companies* (Columbus, Ohio: Bureau of Business Research, The Ohio State University, 1954), p. 14.

[4] Seymour Melman, *Dynamic Factors in Industrial Productivity* (New York: John Wiley & Sons, Inc., 1956), pp. 133-35; Seymour Melman, "Industrial Productivity in Relation to the Cost of Management," a manuscript presented at the annual meeting of the American Statistical Association, New York, 1955, pp. 4-5, 9; and Seymour Melman, "The Rise of Administrative Overhead in the Manufacturing Industries of the United States," pp. 74-86. Administrative personnel includes clerical as well as managerial personnel.

case studies. In one of the cases, a steel works introduced a medium-sized, general-purpose computer (for example, IBM 650) and related equipment into its costing operation; and, in the other, a fabricating plant introduced a large, general-purpose computer (Univac I, for example) and related equipment into its sales, capital assets, payroll, and inventory operations.[5] The data-processing activities had substantial gains in their managerial proportions in both cases. The percentage of managerial to total personnel in data-processing activities increased from 5.7 to 14.5 in the fabricating plant, and from 9.0 to 17.0 in the steel works. These gains resulted from a reduction in clerical personnel and an increase in managerial personnel. An analysis of the data-processing activities, however, revealed that the expansion in the number of managerial personnel was not associated with the staffing requirements of the operations. In other words, the ongoing operation under the electronic method did not require an increase in the proportion of managerial to total personnel.

Dynamics of the Firm

The dynamics of the firm is a dominant reason for an increasing ratio of managerial to total company personnel. In the two cases just mentioned, the increase in the number of managerial personnel was attributed to efforts to modify operations. More managerial personnel were needed to revise manual clerical operations, to analyze and design informational systems, and to construct detailed procedures for the machine processing of data. The continued need for the extra personnel depended upon the future modification of other operations. Managerial personnel were also used to staff a more complex system of cost accounting. The information that became more readily available under electronic data processing was used as the basis for a more intensive analysis of costs. The purpose of the revised accounting system was to modify the cost-price relationship. One may surmise from these cases that both the previous and the newer techniques utilized about the same proportions of managerial to total personnel, but that the process of changing operations required a greater proportion of management personnel.

Changing the activities of the firm generates new and complex problems that must be handled by management. Coping with these problems requires larger managerial staffs than are needed to deal with repetitive problems arising out of unchanged activities. Where the situation is dynamic, the results of particular phases of an operation are foreseen only with great difficulty; it is not feasible to plan a program of action in detail. As a result, executive and technical manpower are needed to solve the problems as they arise.

In a static situation, however, the results of particular phases of an operation are foreseen with less difficulty, and programs of action can be planned in detail. Since decisions on consecutive steps are more routine and automatic, they can be left in the hands of operators after the planning is completed. Formulating the plans, of course, requires extensive managerial resources, but this is a "one-shot" affair. Managerial manpower continues to be needed only if changing conditions not calculable in advance require changing the plans.

The link between the size of management and the dynamics of the firm, accordingly, is based on the functions of management, which include planning and innovation, coordination, administration and control, and routine supervision of the enterprise. These functions are aspects of the managerial task of directing the enterprise in its ongoing operations and in its initiation of and adaptation to change. Within a reasonably stable environment, the direction of these operations tends to be routine once controls are established. However, every aspect of change presents new problems, which begin with innovating and planning the change and extend to coordinating, administering, controlling, and supervising the enterprise in the process of making the change.

[5] C. Edward Weber, "The Firm's Relative Use of Managerial Resources and the Mechanization of Data Processing," an article to be published in the *Journal of Business*.

A dynamic situation can be generated from a variety of circumstances. In a study of five firms, such circumstances included the expansion of output; the rising cost of labor, material, and capital, and the intensification of the competitive situation; the need to develop new products and technologies; the necessity to accommodate to the work force and trade unions.

No mechanistic relationship was found, however, between these circumstances and the relative use of managerial manpower, which was greater only when the changed circumstances presented new and more complex problems. For example:

1 The expansion of crude output in an integrated petroleum company was associated with an increase in the managerial proportion. The increased production involved exploring new fields and drilling new wells. The process may be essentially the same, but it must be applied under different conditions. New oil fields and potential wells, it was suggested, were likely to be geologically different from the last and would present new problems that required extensive knowledge for their solution.

2 In the case of a textile firm, the ratio of managerial employment to total employment increased from 8.9 per cent in 1947 to 13.6 per cent in 1955. This relative increase appeared to be a concomitant of the firm's efforts to reduce its costs and to increase its share of the market. Galvanized by a slump in the industry's product market, the company decided to strike out in new ways:

Merchandising focused its attention on creating a fresh advertising approach and more attractive packaging.

Sales devoted more attention to devising distribution techniques and to training salesmen.

Greater efforts were made in product development and in coordinating the activities of research with production, merchandising, and engineering.

Engineering designed and installed automatic equipment and modified existing equipment, and trained operators for the equipment.

Intensified production scheduling and material handling problems had to be dealt with because of the expansion in the number of products and in the variety of containers for the products.

3 The rise in the level of output was associated with no perceptible increase in the managerial proportion in the large chemical plants of an industrial chemical company. The increase in output proceeded in three stages in these plants. First, greater utilization was made of existing facilities; second, minor modifications were made on existing equipment to increase its output; and third, similar facilities were added. In no phase of the expansion were any basic technical changes undertaken nor were many new problems presented.

4 The above-mentioned chemical company reduced its fabricating costs in response to an intensification of the competitive situation. It initiated cost control systems and refinements in wage incentives, installed mechanized equipment, and redesigned products and processes. These actions required the greater relative use of managerial personnel for the following reasons: Problems in timing and scheduling work created the need for more advanced planning and closer supervision since the newer methods depended upon the tighter integration of operations; the cost control systems had to be staffed; a greater number of technical personnel were needed to redesign the products and processes, to plan for new equipment, and to undertake time and motion studies; efforts to reduce material scrap called for the evaluation of a great many minor phases of the operations previously taken for granted.

The effort to modify operations called for a rise in the ratio of management to other personnel. These efforts were reflected in a variety of circumstances, and further study will, no doubt, uncover an even greater variety of circumstances.

The expansion of output was associated with a rise in the managerial ratio when the extra production was carried on within a new situation, when planning and constructing the extra capacity presented difficulties, and when the rate of expansion was accelerated.

Higher labor, material, and capital costs, and changes in the competitive situation gave rise to cost reduction programs. Greater demands were placed on management since the programs were directed toward the modification of existing processes and the development of new processes.

The profit potential of new products and technologies induced the companies to place greater emphasis on "management-intensive" operations such as research, and on the alteration of production and other company operations.

The necessity to accommodate to the work force and trade unions required some rise in the ratio of management to other personnel, but this was not found to be an important factor in the five companies studied. Other companies faced with high turnover, marked changes in skill needs, or unionization may find this factor more significant.

CONTROLLING PERSONNEL SIZE

The problem of the relative number of managerial personnel is combined with a primary task of managing a business—goal-setting. The objectives determine whether the business is going to innovate and to adjust to new market and technical conditions. The firm certainly cannot isolate itself from all changing conditions, but its goals can intensify the dynamics of the situation. If the firm sets goals such as new markets, new products, and lower costs, it must be prepared to alter its distribution techniques, production methods, and other operations. The process of adjusting operations is a concomitant of having dynamic goals. The firm with dynamic goals can expect higher managerial overhead since the process of change seems to be "management-intensive."

Empire building can also be a dominant stimulus in particular situations even though it does not seem to be a fundamental explanation of the relative growth of managerial personnel. Comparatively elongated chains of command and larger staffs may be highly valued prestige symbols in an individual company, and the resulting managerial overhead may become a serious burden. Effective control, however, cannot be obtained by arbitrary cuts or limits. Such arbitrary action may sabotage the goals of the business since the growth of managerial personnel may be due to the process of change. Where the additional personnel are attributable to empire building, arbitrary cuts or limits make the gaining of larger retinues even more desirable. The consequence may be only the use of more subterfuge.

There is, perhaps, no substitute for a painstaking and judicious review of the situation. This may begin with the goals of the firm, which should be defined in specific terms. If the objective is to cut costs, for example, what costs is the firm attempting to reduce or to eliminate? Are the goals adequate to insure the profits and well-being of the company? A critical review may reveal that a particular objective is not worth the effort or that there is a serious gap in the objectives. For example, there may be no clear-cut market policy.

The evaluation can then be directed to the activities of the business in which managerial overhead is large. What contribution do the activities make to the goals of the firm? Is the contribution worth the cost? A ruthless appraisal should be made if the contribution is nebulous, if it is justified only on the grounds that other firms engage in such activities, or if it is said to be intangible. Perhaps effective results can be obtained from reduced operations; or the entire operation can possibly be eliminated without impairing the success of the firm. An analysis, on the other hand, may indicate that an activity should be strengthened or added.

Managerial costs can be reviewed after the need is established for particular activities. What tasks are performed by managerial personnel? How do they contribute to the direction of the activity? Can the managerial work be eliminated without impairing the activity, or does managerial effort need to be enlarged to insure the success of the activity?

Judgment is very important in the review of

goals, activities, and managerial work. Outsiders can be helpful in raising fundamental questions, but they cannot undertake the review for the company. Familiarity with company operations and objectives is necessary because there are too many ways to rationalize and disguise. The job must be done by top management since the responsibility for reviewing operations and goals must be linked to the authority to take remedial action.

A review of goals, activities, and managerial work may lead to an increase rather than a decrease in managerial overhead. A net gain in the profits and well-being of the company may be obtained from the expansion of management. A continuous review of specific goals and operations can adequately control the relative number of managerial personnel where empire building is not a dominant factor. The problem is to relate managerial effort to the goals of the business.

Where the basis for the relative growth of managerial personnel is empire building, additional action is necessary. The prestige value of relatively large organizations must be minimized. Top management must first determine the nature of existing prestige symbols. Secondly, top management must attempt to set an example in order to influence the prestige symbols in their organization. Emphasis on other symbols of prestige reduces the emphasis on empire building.

Finally, we have considered only the number of managerial personnel. An analysis must also be made of managerial compensation if effective control is to be obtained.

INDUSTRIAL efficiency is determined by the quality of management. From the standpoint of creative energy both capital and labour are powerless unless the man of ability organizes them. These are the instruments the productive use of which depends on the knowledge and judgement of small groups of administrative, commercial, financial, and technical experts. Unless a continuous flow of such ability is attracted to an industry its successful conduct is insecure. . . .

It is the task of management to lead. To do this it must see what is being done, what ought to be done, and what the facts and forces are which assist or impede the doing of it. In the light of careful analysis and study of all the available facts, it must invent or plan a rearrangement of conditions which will make possible the accomplishment of the desired end. Then it must so put its plans before the members of its organization that they will be carried out in the spirit and the letter of the intention. Management, therefore, implies the collection and analysis of facts with a view to understanding, the synthesis of these facts with a view to devising ways and means, and the persuasion and ordering of personnel with a view to execution.

—*James A. Bowie*
EDUCATION FOR BUSINESS MANAGEMENT

Robert C. Turner
EDITOR

TECHNOLOGICAL HORIZONS

CHEMICAL MANIPULATION OF THE GROWTH OF PLANTS

by Charles W. Hagen, Jr.

WHEN YOUR grandson buys his first new house, totter along with him and see the "engineered" landscaping. The lawn will be a smooth, weed-free carpet in a preselected shade of green. Although the building has just been completed, shrubs and trees will be mature and well-formed. Some of the plants will be familiar, others will be far out of their natural range, but all will complement the lines of the house as cosmetics adorn a beauty queen. Out of deference to your age the salesman may explain, "The lawn must be mowed twice each year, but it is guaranteed against weeds for five years, when it will need a new application of antiweed. The hedge can be trimmed and treated with a retarding agent at the same time. The shrubs at the corners are tropical and they tend toward thin growth, so spray them each autumn with a mixed hardiness-inducer and branch-encourager. The taller trees with the sparse horizontal branches should be inoculated in the spring with a dormancy-breaker and the proper shaping formula. If correctly managed, none of the plants will exceed appropriate dimensions for 25 years. We provide an instruction booklet, but, if you wish, a contractor will do the whole job for less than you used to pay a boy each year to mow your lawn."

Science fiction? Perhaps—but a look at projects now under way in botanical and horticultural laboratories suggests that precise chemical control of plant growth is not far off.

Modification of plant forms for human benefit is as old as agriculture. Completely

untutored selection of coarse ancestral grasses by primitive societies gave rise to high yielding grains, such as corn and wheat. Pruning quite probably developed as a means of increasing yield through removal of sterile or diseased wood. Grafting techniques combined desirable root characteristics with fruit quality in situations where achievement of the same ends by hybridization and selection was impractical. Much can still be accomplished by these established techniques in bringing form and quality of plants to new excellence for special purposes. Each method, however, has limited applicability. Similar and superior control of growth will soon be achieved by application of chemical plant growth regulators.

GROWTH REGULATION

THE PLANT growth regulators include hormones that normally determine form and structure of the intact plant, as well as synthetic substances that have been found to accelerate or retard specific growth phases. An early and prominent example is provided by the auxins. Experience with these can serve as a model for the exploitation of growth regulators and will allow some projection toward applications of more recent discoveries.

The auxins were originally described as hormones produced in growing tips of plant organs. Transported toward maturing cells, they promote elongation of the cells and thereby influence the plant's growth in length. The chemical structure of the natural auxin has been worked out, and chemists have manufactured dozens of similar compounds. Each of these has been applied to plants, and a series of additional effects has been discovered.

Some of the synthetic auxins are now used regularly to promote rooting of refractory cuttings. Others, such as 2,4-D, can destroy broad-leaved weeds while leaving grasses unharmed. This particular effect of auxins has initiated a successful search for unrelated chemicals that will destroy pestiferous plants which compete with desired crops. Auxins can also prevent potatoes from sprouting in storage and can hold mature fruits on the tree until the farmer is ready to pick them. These are all applications that developed as side effects in the "pure" research concerned with the hormonal regulation of growth in the normal plant.

EXTENSION OF RANGE

THE BOTANISTS and horticulturists are now eagerly investigating another set of hormones termed, tentatively, the gibberellins. Japanese farmers had been bothered by a "crazy seedling" disease of rice. Their botanists obtained from the fungus that caused the disease several related chemicals that increased the growth of many plants. Later it was demonstrated that certain dwarf plants could be brought to normal stature by application of gibberellins from the fungus, but the same effect could also be produced by extracts of higher plants. It appears, therefore, that gibberellins are concerned with regulation of elongation of plant parts as are the auxins, but just as with the auxins, a host of additional effects has been reported.

Most striking has been the hastening of flowering, particularly in species which must normally pass through a cold season before fertile shoots are initiated. Just such a cold requirement now defines the southern limit of culture of several fruits. Peaches, for example, flourish in subtropical environments until changing day length brings about a dormant, or inactive condition. When held at high temperatures throughout the winter, peaches fail to open buds normally and little fruit is set even when the plant survives. Gibberellin, or a similar dormancy-breaker, which could be applied as a spray, would greatly extend the range of temperate climate fruits and ornamental plants.

Dormancy is generally induced by those aspects of the environment that fluctuate regularly in the annual cycle: such factors as day length, temperature, and rainfall. These initiate a series of obscure changes within the plant marked by cessation of growth, formation of protected buds, and, in temperate plants, resistance to low temperatures. Inability to synchronize the developmental pattern with seasonal changes is often responsible for failure of a species to survive in a new habitat. Because the alterations involved are basically chemical, it is not unlikely that substances will be discovered that induce dormancy and cold resistance in tropical species and thus impart the ability to survive in more northern latitudes.

CONTROL OF AGING

MANY plants exhibit different growth forms in youth and old age. In the case of Canary Island ivy and the related English ivies, the familiar climber is a juvenile form. Mature plants produce erect self-supporting branches that never revert naturally to the juvenile structure. Gibberellin, however, will "rejuvenate" mature forms of the variegated Canary Island ivy.

Similar contrasts between juvenile and senescent forms pose a problem to the citrus industry. Here both forms produce fruit, but the tree becomes spiny as it

ages while the fruit becomes smaller and less palatable. Because the senescent qualities are transmitted to offspring produced by grafting or cutting, desirable varieties, especially the seedless ones, have relatively short life in the trade. Rejuvenation by chemical treatment, whether applied to whole trees or to sprigs employed in propagation, could prolong the usefulness of valuable stocks.

SHAPING OF PARTS

The size and shape of plant parts are determined by the orientation and rate of cell division or by the direction and extent of cell enlargement. These operations are regulated by the genetic constitution of the plant. Cabbage and its relatives demonstrate the diversity of form that can be achieved when the proper genetic controllers can be found. The ancestral cabbage resembled most closely the southerner's collards. Through ages of selection and combination of modified genes, almost every part of the plant has been caused to enlarge and serve as a storehouse of nutrients useful to man. Enlargement of the leaves and shortening of the stem leads to cabbage. Thickening of the stem yields kohlrabi. Thickening of the flower stalks gives broccoli or, if even more extreme, cauliflower. In Brussels sprouts, buds along the main stem have become enlarged, while in a closely related plant, expansion of root tissues has produced the yellow turnip. All of these have been derived from the same weeds by genetic means through what amounts to encouragement of cell division or cell enlargement in specific tissues. Yet the genes apparently control these operations through the elaboration of chemical regulators.

Within recent years it has become possible to determine at will whether cell division or cell enlargement will take place in plant cells and to control the degree to which each process will proceed. So far this has succeeded only with particularly favorable bits of tissue grown under rather special conditions. With further extension of the work, control of these processes by chemical means offers possibilities in plant architecture that are limited only by our imaginations. The bizarre but useful forms of the cabbages have been obtained after hundreds of years of selection of purely fortuitous gene mutations. Equivalent results may some day be achieved by one-shot sprays or inoculations of the proper growth-regulating chemicals.

DWARFING

Restriction of growth can be as significant as promotion of growth, and inhibitors are often easier to find. Specificity of action, whether selective as to the species, tissue, or stage of development influenced, can provide unusual applications. Where only germinating seedlings are affected, weeds may be suppressed in established crops or lawns. Suppression of male flower production would tremendously reduce labor costs in the hybrid corn program, for seed production now requires expensive manual removal of the tassels, which produce unwanted pollen. All plants produce an excess of lateral buds along the stems, and the degree to which these develop determines the branching pattern. Modification of the expression of lateral buds could alter the appearance and usefulness of varieties employed in landscaping.

Even general growth suppression, resulting in dwarfing, has many applications. Cross-country power lines are now kept open for inspection and repair by judicious application of weed killers. A low growth must remain, however, to prevent erosion of the soil beneath. The benefits to a householder of harmless growth retarders applied to lawns, hedges, and foundation plants are obvious.

Moreover there exist in nature many weeds with attractive features; but they are coarse and unusable because adaptation to their usual habitat demands excessive growth in length. Application of appropriate dwarfing agents could produce useful forms from these. Chemicals are available now that reduce the height of susceptible plants without apparently affecting vigor or flower quality. Infinitesimal amounts are required within the plant, and the regulators have lasting effects when applied in the soil.

These various methods of manipulating plant growth are recent and relatively unexploited. As our knowledge of normal growth coordination increases, there will inevitably be associated means of modifying the normal processes. With even minor modification, hitherto unexploited plants, which exist in wild variety in nature, can become amenable to man's development, and familiar plants may be adapted to new uses. We can foresee a new era in agriculture and horticulture in which problems of fertility and pest control have been overcome and attention is centered on forcing the individual plant to conform to rigidly specified size and form. Chemical growth regulators will play a major role in this future.

book notes and reviews

Lois Shepherd Headings EDITOR

A NOTE FOR THE SEASON

Keep thy heart with all diligence; for out of it are the issues of life. (Proverbs 4:23)

BEFORE WE speak of the plethora of "neo-orthodoxies" today—and the world of business has several of its own—we would like to put them in some perspective. After every spurt of progress, man apparently must retrench for a period of digestion, a period during which he attempts to synthesize his immediate past with that more distant. It is usually also a period of some disillusion because progress seems to have hit a snag or fostered an atmosphere of overoptimism or because it must change course and hack out a new direction. (It is becoming an intellectual commonplace now, for example, to say that the coming era will belong to the field of biology as the past one has to physics.)

This is, of course, nothing but the old pattern of action and reaction, revolution and counterrevolution in history. It results in a series of syntheses, the sum of which we call progress.

Each retrenchment becomes an age of soul-searching, of introspection; an age of disillusion with the world and often with human nature; a period of appreciation of subtlety, irrationality, and complexity. Its excesses most often run to anti-intellectualism and bad taste as do those of more progressive periods to fanaticism and artistic aridity. Historical terms for some of these periods of retrenchment are Hellenistic Greece, The Restoration, and The Age of Romanticism. No special perspicacity is necessary, however, to discern this trend today.

On the intellectual side there is the spate of

SPECIFICALLY FOR THE BUSINESS EXECUTIVE

LATE FALL

Robert C. Bolles and others, NEBRASKA SYMPOSIUM ON MOTIVATION 1958 (U. of Neb.)

Bratt, BUSINESS FORECASTING (McGraw)

C. G. Browne and Thomas S. Cohn, STUDY OF LEADERSHIP (Interstate)

Chamberlain, SOURCEBOOK ON LABOR (McGraw)

Dimitris Chorafas, OPERATIONS RESEARCH FOR INDUSTRIAL MANAGEMENT (Reinhold)

Wesley C. Clark (ed.), JOURNALISM TOMORROW (Syracuse)

John W. Coughlan, WHAT THE BUSINESSMAN SHOULD KNOW ABOUT REGULATION OF PUBLIC UTILITIES (Public Affairs)

Donald A. Covalt, REHABILITATION IN INDUSTRY (Grune & Stratton)

Scott Munson Cutlip and Allen H. Center, EFFECTIVE PUBLIC RELATIONS (Prentice)

D. R. Davies and R. T. Livingston, YOU AND MANAGEMENT (Harper)

Bernard W. Demsey, FUNCTIONAL ECONOMY (Prentice)

John K. Galbraith, JOURNEY TO POLAND AND YUGOSLAVIA (Harvard)

Cecil E. Goode, PERSONNEL RESEARCH FRONTIERS (Public Personnel Ass'n)

H. M. Hausner, MODERN MATERIALS (Academic)

Fritz Heider, PSYCHOLOGY OF INTERPERSONAL RELATIONS (Wiley)

Robert S. Holzman, SOUND BUSINESS PURPOSE (Ronald)

Eliot D. Hutchinson, HOW TO THINK CREATIVELY (Abingdon)

Ruth Johnston, PERSONNEL PROGRAM GUIDE (Saunders)

Harold W. Kuhn, LECTURES ON THE THEORY OF GAMES (Princeton)

Henry A. Landsberger, HAWTHORNE REVISITED (Cornell)

F. H. Lawson, INTRODUCTION TO THE LAW OF PROPERTY (Oxford)

Frederick G. Lesieur, SCANLON PLAN (A frontier in labor-management cooperation, Wiley & Technology Pr., M.I.T.)

Richard A. Lester, AS UNIONS MATURE (Princeton)

Loney, BRIEFING AND CONFERENCE TECHNIQUES (McGraw)

David C. McClelland, Alfred L. Baldwin, Urie Bronfenbrenner and Fred L. Strodtbeck, TALENT AND SOCIETY (Van Nostrand)

Norman R. F. Maier, APPRAISAL INTERVIEW (Wiley)

R. Mairiott, INCENTIVE PAYMENT SYSTEMS (de Graff)

James G. March and Herbert A. Simon, ORGANIZATIONS (Wiley)

Hughes Mearns, CREATIVE POWER (Dover)

Robert K. Merton, MASS PERSUASION (Free Press)

Oskar Morgenstern, INTERNATIONAL FINANCIAL TRANSACTIONS AND BUSINESS CYCLES (Princeton)

Gardner Murphy, HUMAN POTENTIALITIES (Basic)

Benjamin Newman, AUDITING (A CPA review manual, Wiley)

R. S. Peters, CONCEPT OF MOTIVATION (Humanities)

William Popper, MONEY GOALS AND MUTUAL FUNDS (Vantage)

David R. Roberts, EXECUTIVE COMPENSATION (Free Press)

Stanley J. Seimer, SUGGESTION PLANS IN AMERICAN INDUSTRY (Syracuse)

William D. Sheldon and Leonard S. Braam, READING FOR DOLLARS AND SENSE (Syracuse)

John A. Straley, WHAT ABOUT MUTUAL FUNDS? (Harper)

Stephen B. Sweeney (ed.), METROPOLITAN ANALYSIS (Important elements of study and action, U. of Pa.)

Ordway Tead, THE CLIMATE OF LEARNING (Harper)

A. T. Welford, AGEING AND HUMAN SKILL (Oxford)

Charles S. Whiting, CREATIVE THINKING (Reinhold)

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Rene Wormser, WORMSER'S GUIDE TO ESTATE PLANNING (Prentice)

EARLY WINTER

J. Stacy Adams, INTERVIEWING PROCEDURES (A manual for survey interviewers, U. of N.C.)

Esther Becker-Lawrence, DICTIONARY OF PERSONNEL AND INDUSTRIAL RELATIONS (Philosophical)

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J. A. C. Brown, SOCIAL PSYCHOLOGY OF INDUSTRY (Pelican)

Richard Carter, THE DOCTOR BUSINESS (Doubleday)

Fred De Armond, EXECUTIVE PERFORMANCE (Prentice)

Frederick C. Dyer, EXECUTIVE'S GUIDE TO HANDLING PEOPLE (Prentice)

David W. Ewing (ed.), EFFECTIVE MARKETING ACTION (Harper)

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neo-orthodoxies: neo-orthodoxy in political thought in the "new conservatism" of Russell Kirk and Peter Viereck (new in the depth of its theoretical structure); neo-orthodoxy in education with the reaction against "social adjustment" and the returning emphasis on a content curriculum; neo-orthodoxy in economic philosophy in the thought of Friederich von Hayek and Milton Friedman; neo-orthodoxy in business philosophy in the criticism of the role of social responsibility for business by Frank Knight and Theodore Levitt; and neo-orthodoxy in religion in the theological speculations of Paul Tillich, Karl Barth, Reinhold Niebuhr, and Jacques Maritain within the Christian tradition and Martin Buber in the Jewish.

In the everyday world we might point to the return of Empire style for women's clothing; antique type faces in graphic design; and in construction and furnishings design, the addition of the Oriental curve to the architectural straight line. (The revival of *art nouveau,* the elaborately ornamented style in furnishings and interior decoration developed by Louis Tiffany around the turn of the century, is

Katherine Finney, INTERBANK DEPOSITS (Columbia)

Alex George, PROPAGANDA ANALYSIS (Row, Peterson)

Genieve N. Gildersleeve, WOMEN IN BANKING (Public Affairs)

Bent Hansen, ECONOMIC THEORY OF FISCAL POLICY (Harvard)

Wayne Hodges, COMPANY AND COMMUNITY (Harper)

Harry G. Johnson, INTERNATIONAL TRADE AND ECONOMIC GROWTH (Harvard)

Ray Josephs, STREAMLINING YOUR EXECUTIVE WORKLOAD (Prentice)

Barnard Karsh, DIARY OF A STRIKE (U. of Ill.)

Howard Ketcham, COLOR PLANNING FOR BUSINESS AND INDUSTRY (Harper)

Seymour M. Lipset and Reinhard Bendix, SOCIAL MOBILITY IN INDUSTRIAL SOCIETY (U. of Calif.)

Morton J. A. McDonald, SUCCESSFUL REAL ESTATE ADVERTISING (Prentice)

Frank A. Mercer, MODERN PUBLICITY 1958-1959 (Crowell)

Elon H. Moore, NATURE OF RETIREMENT (Macmillan)

Richard L. Nelson, THE SELECTION OF RETAIL LOCATIONS (Dodge)

Erwin Nemmers and Cornelius Janzen, DICTIONARY OF ECONOMICS (Littlefield, Adams)

Marc Leon Nerlove, DYNAMICS OF SUPPLY (Johns Hopkins)

Dr. Paul E. Parker, HOW TO USE TACT AND SKILL IN HANDLING PEOPLE (Fell)

Charles B. Roth, GRASS ROOTS SALES MANAGEMENT TECHNIQUES (Prentice)

Virgil H. Rotroff, WORK MEASUREMENT (Reinhold)

Tibor Scitovsky, ECONOMIC THEORY AND WESTERN EUROPEAN INTEGRATION (Stanford)

Arthur Brown Sherman, HOW TO EXPLOIT AMENITIES AND HIDDEN VALUES IN SELLING REAL ESTATE (Prentice)

Martin Shubik, STRATEGY AND MARKET STRUCTURE (Competition, oligopoly, and the theory of games, Wiley)

George D. Spache, Ph.D. and Paul C. Berg, Ph.D., FASTER READING FOR BUSINESS (Crowell)

Don Summa, ASSIGNMENT OF INCOME (Ronald)

P. Winch, IDEA OF A SOCIAL SCIENCE AND ITS RELATION TO PHILOSOPHY (Humanities)

Robert Wood, SUBURBIA (Its people and their politics—a controversial and pioneering work, Houghton)

James C. Wriggins and George Byron Gordon, REPAIRS VS. CAPITAL EXPENDITURES (Ronald)

John T. Zadrozny, DICTIONARY OF SOCIAL SCIENCE (Public Affairs)

LATE WINTER

Dalbir Bindra, MOTIVATION: A SYSTEMATIC REINTERPRETATION (Ronald)

Hubert Bonner, GROUP DYNAMICS (Ronald)

Llewellyn Gross (ed.), SYMPOSIUM ON SOCIOLOGICAL THEORY (Row, Peterson)

Darrel Huff and Irving Geis, HOW TO TAKE A CHANCE (Authors of "How to Lie with Statistics," Norton)

Libby F. Jessup, LAW OF RETIREMENT (Oceana)

Lawrence C. Lovejoy, WAGE AND SALARY ADMINISTRATION (Ronald)

Carl S. Shoup and Richard A. Musgrave (eds.), READINGS IN THE ECONOMICS OF TAXATION (Irwin)

Milton H. Spencer and Louis Seigelman, MANAGERIAL ECONOMIC ANALYSIS (Irwin)

Stoops, GUIDANCE SERVICES: ORGANIZATION AND ADMINISTRATION (McGraw)

WATCH FOR

Peter F. Drucker, LANDMARKS OF TOMORROW (Harper)

Wilfred Owen, CITIES IN THE MOTOR AGE (Viking)

Executive Health

Pierre Boucheron, HOW TO ENJOY LIFE AFTER SIXTY (Archer)

Charles A. Cerami, LIVING THE BUSINESS LIFE (Prentice)

John W. Gofman, M.D., WHAT WE DO KNOW ABOUT HEART ATTACKS (Putnam)

Nancy E. Gross, LIVING WITH STRESS (McGraw)

Irving L. Janis, PSYCHOLOGICAL STRESS (Wiley)

Marie Jahoda, CURRENT CONCEPTS OF POSITIVE MENTAL HEALTH (Basic)

Lawrence S. Kubie, M.D., NEUROTIC DISTORTION OF THE CREATIVE PROCESS (U. of Kansas)

Max Rinkel, M.D. with H. C. B. Denber, M.D. (eds.), CHEMICAL CONCEPTS OF PSYCHOSIS (McDowell)

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just now hitting full stride.)

To return, however, to the current re-examination of progressive thought in business, the reaction seems to be against the growing orientation to the community or the social emphasis in general—the clarion call is to individualism (*The Lonely Crowd* with its biting analysis of the "other-directed" and *The Organization Man* in its critique of the relationship of company and employee). Frank Knight refers to the movement toward social responsibility in business as a new feudalism; Levitt sees in it a danger of fascistic society.

Concern with the role of business in contemporary society and the nature of today's capitalism almost overflows the pages of economic and business journals. Especially recommended to our readers is a recent analytical exchange in the *Journal of Business of the University of Chicago:* "The Apologetics of 'Managerialism'" by Edward S. Mason, Dean of Harvard's Graduate School of Public Administration (January, 1958) and the comment on it (July, 1958) by Robert C. Turner, Professor of Business Economics and Public Policy in the School of Business at Indiana

University. We will make no attempt to summarize this excellent discussion, but we cannot refrain from commenting that one of its more interesting, if minor, implications is that the kind of collectivized state that Turner sees evolving disturbs him not at all. (This state is a combination of bureaucratic business and bureaucratic government, which, he emphasizes, has not been foisted off on business but has instead been actively and assiduously promoted by it.) His implied faith in the new managerial class is not shared, of course, by C. Wright Mills *(The Power Elite)* and apparently not by Levitt *(Harvard Business Review*, Sept.-Oct., 1958). It will seem strange to some readers that his equanimity, however, *is* shared by A. A. Berle (the socialist magazine *Dissent* takes him severely to task for his recent mellowing and asserts that Berle's belief in the possibility of a corporation's developing a conscience is softheaded).

This then is a fragmentary sketch of the temper of re-examination and self-examination in the business community. It is this concern that leads Peter Drucker to call for the development of a true business "discipline"—although in contrast with the truly neo-orthodox, his thinking is basically an extension of progressive emphasis on social responsibility. The principal need as he sees it is a larger and better group of professional managers. And this can only develop from a substantial body of knowledge thoroughly grounded in a universally acceptable ideology. He believes that fulfilling these considerations is paramount for the perpetuation of a business society. He has often pointed out, of course, that the businessman feels (if he fails to conceptualize it for himself) that capitalism revisited must spell out a clearer picture of its role on the future world scene. At the same time he has warned that, unfortunately, too many believe that by repeating "free enterprise" often enough, any institution can be justified to a changing society.

According to these thinkers, the future professional manager does indeed have his job cut out for him. For on his shoulders falls the formidable task of striking a truly equitable balance among the conflicting interests of shareholders, employees, customers, and the general public. And most crucial for this is the obligation to rightly judge the public interest. This is assuming that the manager has an adequate grasp of the equities involved in such issues as the directorial weight of controlling interests, proxy contests, the values and evils of paternalism, executive compensation, and consumer sovereignty with its whole complex of free will and motivational research.

Surely this would seem to require Solons—which accounts for the growth of the ethical dimension in this area. Now most executives plead lack of time for reflection, but they could more accurately admit that by and large they have almost lost the taste and aptitude for it. They have come to depend on the Druckers, the Masons, the Levitts, the Turners. The theorist, though, needs more active participation from the practical businessman—a participation that consists of more than the tricks of the trade or the "facts of life"—if business society is not to become anachronistic.

This is the principal burden of a recent article in *Fortune*, "The Businessman's Moral Failure" by Rabbi Louis Finkelstein (September, 1958). The responsibility, both social and individual, demanded of the modern executive must spring, he says, from a renewal of moral and ethical concern that goes deeper than well-meaning "codes" or "statements of objectives," and deeper than a perfunctory genuflection to the forms of some religious faith.

As Rabbi Finkelstein puts it[1]:

"They [businessmen] worry about their place on the economic ladder, but are not concerned sufficiently with whether the civilization in which they work is likely to collapse. They can defeat a local competitor, but may well be defeated by the competitor of us all, which is moral decay. . . . Nations have been wrecked because they lacked an overriding moral goal to which individuals could commit themselves. History shows us that when we become success-dominated, we lose sight of our real reasons for living." (p. 116)

And later, quoting a major executive,

" 'An executive can buy brains and can buy experience, but character is something he must supply himself.'

And what *is* a man's character [asks Finkelstein] but his personal moral dimension, the goals he sets for himself, his sense of honesty and of responsibility, his relations with others? . . . Men as individuals and as corporations must make an effort to understand what they are doing, and why they are doing it. . . .

There are some corporations which insist that their executives assume responsibility for civic and community improvement. But the businessman can go further. In his training school for management he can introduce students of ethics, as well as management experts and psychologists, to consider the responsibilities of the business executive. He can overcome his anti-intellectualism. He can try to gain knowledge that will clarify the problems of wise decision-making. . . . The businessman who will take time to contemplate and to ponder the ethical dimension of life will discover new realms in which he can develop his talents, freeing himself from the bondage to private gain that menaces the

[1] Rabbi Louis Finkelstein, "The Businessman's Moral Failure," *Fortune*, LVIII (September, 1958). Courtesy of *Fortune* magazine.

maturing business executive. . . . He will accept philosophically the occasional defeats and frustrations of his business career. He will carry his burdens serenely and thus preserve his own life, as well as that of the community." (pp. 117 and 194)

We have quoted this article at some length because it is such a fine introduction to our following discussion of religious literature currently available in paperbacks. Not that the subject of ethics is necessarily a religious one—it is of course not bound by doctrine. On the other hand, the literature noted here is much broader than the usual confines of any one religious dogma and includes recommended reading, for example, in Eastern religious philosophy. As we mentioned above, religion as well as other fields has come in for its period of reexamination. The principal criticism has centered around "the social gospel" and modern liberal religion. It must be pointed out, however, that neo-orthodoxy in religion has longer roots than most of the other neo-orthodoxies.

Neo-orthodoxy in religion is basically a revival of theology with its emphasis on the nature of God and the relation of man to God. Because of its fountainhead in the thinking of Kierkegaard, most of the best thought is existentialist. And because of the persistent influence of Feuerbach, it is also socially responsible.

(It might be noted here peripherally that the vitality of Kierkegaard's thought is evident in strictly atheistic existentialism as developed by Sartre, Camus, and Simone de Beauvoir.)

The best introduction to modern theology—or, as some prefer to call it, the philosophy of religion—is a volume edited by Will Herberg, Professor of Judaic Studies and Social Philosophy at Drew University. The book, FOUR EXISTENTIALIST THEOLOGIANS (Doubleday Anchor), consists of selections from the works of Jacques Maritain (Roman Catholic), Nicolas Berdyaev (of the Eastern Orthodox tradition), Martin Buber (of the Judaic tradition), and Paul Tillich (Protestant), with introduction and notes by Professor Herberg.

Five common themes unite the thinking of these men: (1) their ontological orientation—that is, the fact that they develop their thought in philosophic form rather than as revealed truth and base their appeal to human reason and existence on an analysis of being (existence in the abstract, often called essence); (2) the existentialist bent of their thinking—that is, the departure for their ontological discussions is from existence (*enacted* being) rather than from essence (the *concept* of being) and includes considerations of experiential concreteness, personal concern and commitment, and especially the uniqueness of the existing individual; (3) their personalistic emphasis that derives from this last consideration, as is seen in their insistence on the primacy of the person, on his uniqueness and integrity; (4) a social concern growing from their agreement "in seeing true personal being fulfilled, not in isolation, but in community; and they all understood community in the same personalistic way, as involving mutual relation of man with man, rather than a system of external institutions in which the self is diminished and distorted. . . ." (p. 4); and (5) their interest in the intellectual and cultural life of their time and their desire to demonstrate the relevance of a cross-fertilization of secular culture and theology.

Naturally their different traditions are apparent in the diversity of ways in which they develop these themes. And their basic orthodoxy, again as opposed to liberal religion, becomes evident in their doctrines of sin and evil, which connect their ontologies (or doctrines of being) with their soteriologies (or doctrines of redemption).

It might be helpful to qualify here a bit: The orthodoxy of, for example, a Tillich is not the literal orthodoxy of the average church-goer or even the average clergyman; it is, rather, highly symbolized and abstractly reasoned. In this lies its appeal and challenge to the secular thinker.

Among complete works available in paperbacks by these theologians are: Jacques Maritain, *Existence and the Existent* (Image), *Creative Intuition in Art and Poetry* (Meridian), and *St. Thomas Aquinas* (Meridian); Nicolas Berdyaev, *The Beginning and the End* (Torchbooks) and *Dostoevsky* (Meridian); Martin Buber, *Between Man and Man* (Beacon), *Eclipse of God* (Torchbooks), *For the Sake of Heaven* (Meridian), *Moses: The Revelation and the Covenant* (Torchbooks), and *Paths in Utopia* (Beacon); Paul Tillich, *The Religious Situation* (Meridian), *The Protestant Era* (Phoenix), and *Dynamics of Faith* (Torchbooks). There is also a collection of Buber's writings edited by Professor Herberg, *The Writings of Martin Buber* (Meridian), and a collection of essays by Tillich, Herberg, Niebuhr, and others called *Religion in America* (Meridian).

The works of the brothers Niebuhr have been particularly popular among both secular and religious thinkers in America (both are frequent contributors to the little magazines and *The Atlantic*). Reinhold Niebuhr, Vice-

PEOPLE WILL BE TALKING ABOUT

LATE FALL

Samuel Beckett, THE UNNAMABLE (Evergreen Books, Grove)
Albert Camus, CALIGULA AND THREE OTHER PLAYS (Knopf)
Erwin D. Canham, COMMITMENT TO FREEDOM (Houghton)
Stuart Chase, SOME THINGS WORTH KNOWING (Harper)
Robert L. Foreman, THE HOT HALF HOUR (About a top-rated TV quiz show, and the people who run it, Criterion)
Intro. by Stewart H. Holbrook, MR. OTIS (Spoof on primitive-modern art, Macmillan)
Alexander King, MINE ENEMY GROWS OLDER (S. & S.)
Marya Mannes, MORE IN ANGER (Lippincott)
Yukio Mishima, CONFESSIONS OF A MASK (New Directions)
Raymond Peynet, THE LOVER'S KEEPSAKE (Perpetua Books, distrib. in U.S. by Brit. Bk. Centre)
André Pieyre de Mandiargues, GIRL BENEATH THE LION (Grove)
Alastair Reid, OUNCE, DICE, TRICE (Illustrated by Ben Shahn, Little)
THE RUBLE WAR (Sensational CBS radio and TV broadcasts of July 21-23, Smith, Keynes)
Austin Tappan Wright, ISLANDIA (Rinehart)

EARLY WINTER

Joseph and Stewart Alsof, THE REPORTERS TRADE (Reynal)
Pearl S. Buck and Carlos P. Romulo, FRIEND TO FRIEND (John Day)
Jacques Casanova, THE VENETIAN YEARS (First volume of a six-volume edition of the only complete, unexpurgated English translation of the memoirs of Casanova, Putnam)
Jean Cocteau, HAND OF A STRANGER (Horizon)
Pietro di Donato, THIS WOMAN (Ballantine)
William O. Douglas, WEST OF THE INDUS (Doubleday)
George S. King, M.D., DOCTOR ON A BICYCLE (Rinehart)
Eric Larrabee and Rolf Meyersohn (eds.), MASS LEISURE (Free Press)
Moshe Shamir, THE KING OF FLESH AND BLOOD (Vanguard)
Charles Van Doren, LETTERS TO MOTHER (Channel)

LATE WINTER

Pat Frank, ALAS BABYLON (Novel of small town in central Florida in aftermath of world-wide thermonuclear war, Lippincott)
Marek Hlasko, THE CEMETERIES and NEXT TO PARADISE (Dutton)
C. Wright Mills, CAUSES OF THE THIRD WORLD WAR (S. & S.)
James Reichley, THE GANG'S ALL HERE (A story about the kind of Republican National Convention that may be held in 1964, Houghton)
Bernard Schwartz, THE PROFESSOR AND THE COMMISSIONS (Knopf)
Alexander de Seversky, AMERICA? SO YOUNG TO DIE (McGraw)
Stravinsky and Robert Craft, CONVERSATIONS WITH IGOR STRAVINSKY (Doubleday)

President of the faculty of Union Theological Seminary and the theologian of the pair, is represented in paperbacks by *An Interpretation of Christian Ethics* (Meridian), *Leaves from the Notebooks of a Tamed Cynic* (Meridian), and *The World Crisis and American Responsibility* (Reflection); H. Richard Niebuhr, of the Yale University faculty and the religious sociologist and historian of the two, by *Christ and Culture* (Torchbooks) and *Social Sources of Denominationalism* (Meridian).

Among the outstanding sources of modern theological thought is the great mid-nineteenth-century work by **Ludwig Feuerbach,** THE ESSENCE OF CHRISTIANITY (a volume now reprinted in Harper Torchbooks in the George Eliot translation with an introductory essay by Karl Barth and a foreword by H. Richard Niebuhr). Benjamin Nelson, General Editor for Harper's new Library of Religion and Culture, calls Feuerbach the "unsung prophet of the twentieth century" in his biographical sketch for this edition (p. *ii*) and credits him with influencing Kierkegaard, Nietzsche, Freud, Sartre, Buber, and Fromm.

Barth's introduction is noteworthy because he is one of Feuerbach's mightiest antagonists and almost the lone titan of otherworldliness among modern theologians. This extremely influential Protestant theologian, whose main concern is for "the revealed primacy and sovereignty of God as the starting point of all Christian reflection" (Niebuhr, "Foreword," p. *vii*), is represented in paperbacks by *The Word of God and the Word of Man* (Torchbooks), *The Faith of the Church* (Meridian), and, with Rudolf Bultmann, *Myth and Christianity* (Noonday).

The writings of Soren Kierkegaard include *Attack on "Christendom"* (Beacon), *Edifying Discourses* (Torchbooks), *Fear and Trembling* and *Sickness Unto Death* (Anchor), and *Purity of Heart* (Torchbooks).

The third nineteenth-century giant to mold modern religious thought, Friedrich Nietzsche, is represented by *Beyond Good and Evil* (Gateway), *The Birth of Tragedy* and *The Genealogy of Morals* (Anchor), *Thus Spake Zarathustra* (Gateway), and *The Use and Abuse of History* (Liberal Arts).

Several paperbacks should be included here, in some such category as religious discussion, for they are primarily commentaries on facets of religious thought or experience from perspectives

outside the field of religion itself. They are important because they are either classics that cannot be passed over or comments of contemporary pertinence.

Among the first group are Henri Bergson's *The Two Sources of Morality and Religion* (Anchor), C. G. Jung's *Modern Man in Search of a Soul* (Harvest), William James' *The Varieties of Religious Experience* (Mentor), George Santayana's *Interpretations of Poetry and Religion* (Torchbooks), and Edwyn Bevan's *Symbolism and Belief* (Beacon). (This work by Bevan, the famous pupil of Gilbert Murray, which was originally the 1933-34 Gifford Lectures, has been compared to James' *Varieties of Religious Experience.*)

An unusual book is one by an eminent biologist, **Edmund W. Sinnott**, called **THE BIOLOGY OF THE SPIRIT** (Compass). Based upon laboratory findings, the fundamental thesis is that development and behavior display significant similarities due to a common origin in biological purposiveness. This thesis, presented in an earlier work entitled *Cell and Psyche*, is here developed into a case for the existence of a "human spirit."

To turn to the historical side of religion and religious traditions other than those of the West, two classics in early religion must be mentioned: Gilbert Murray's *Five Stages of Greek Religion* (Anchor) and Robert H. Lowie's *Primitive Religion*. Two sacred books of the East are available in the Mentor series: *The Song of God: Bhagavad-Gita*, the Gospel of Hinduism translated by Swami Prabhavananda and Christopher Isherwood (introduction by Aldous Huxley); and *The Meaning of the Glorious Koran*, with an explanatory translation by Mohammed Marmaduke Pickthall. Two interpretative works written especially for the layman are *Indian Thought and Its Development* by Albert Schweitzer (Beacon) and *Three Ways of Thought in Ancient China* by Arthur Waley (Anchor). A notable attempt to show the connections between Oriental and Christian interpretations of spiritual reality is *The Supreme Identity: An Essay on Oriental Metaphysic and the Christian Religion* (Noonday) by Alan W. Watts, Dean of the American Academy of Asian Studies in San Francisco.

Before leaving this discussion of religious books in paperback, we would like to recommend a couple that are a little less pretentious but exceedingly rewarding: Hilaire Belloc's delightful *The Path to Rome* (Image), which in the guise of a foot journey from Lorraine to Rome supports Belloc's brilliant reflections on the Christian tradition of Europe, and the beautiful novel by Hermann Hesse, *Siddhartha* (New Directions).

Noteworthy fall books on religion (in hard cover) include: Marcus Bach, *God and the Soviets* (Crowell); Charles S. Braden, *The World's Religions* (Abingdon); Martin Buber, *I and Thou* (new ed.; Scribner); John Coulson, ed., *The Saints* (Hawthorn); Merrimon Cuninggim, ed., *Christianity and Communism* (Southern Methodist); Emile Dermenghem, *Muhammad and the Islamic Tradition* (Harper); John La Farge, *An American Amen* (Farrar); Ignace Lepp, *From Karl Marx to Jesus Christ* (Sheed & Ward); C. S. Lewis, *Reflections on the Psalms* (Harcourt Brace); Jacques Maritain, *The Degrees of Knowledge* (Scribner); Thomas Merton, *The Secular Journal* (Farrar), *The Tower of Babel* (New Directions); Harry C. Meserve, *No Peace of Mind* (Harcourt Brace); J. B. Phillips, trans., *The New Testament in Modern English* (Macmillan); William G. Pollard, *Chance and Providence* (Scribner); Stanley J. Rowland, Jr., *Land in Search of God* (Random); Louis Schneider and Sanford M. Dornbusch, *Popular Religion: Inspirational Books in America* (Univ. of Chicago); Fulton J. Sheen, *Life of Christ* (McGraw); Jean Steinmann, *St. John the Baptist and the Desert Tradition* (Harper); Richard W. Sterling, *Ethics in a World of Power* (Princeton); Elizabeth Gray Vining, *Friend of Life: The Biography of Rufus M. Jones* (Lippincott); Joachim Wach, *The Comparative Study of Religions* (Columbia).

Another timely book is Alden Hatch's *Crown of Glory*, a revised edition of the life of Pope Pius XII, published by Hawthorn.

WE HAD HOPED to include in this issue a listing of fall art books but were completely overwhelmed by the outpouring of really fine art portfolios and commentaries. We would therefore suggest to readers interested in building art libraries (which are evidently becoming more and more popular), that they get current catalogs from the following art publishers: Harry N. Abrams, 10 East 44th Street, New York; George Braziller, Inc., 215 Fourth Ave., New York 3; Crown Publishers, 419 Fourth Ave., New York 16; New York Graphic Society, Greenwich, Conn.; Skira Art Books, 381 Fourth Ave., New York 16; and Universe Books at the same address.

Harry N. Abrams, through Abradale Press, will also publish expensive Bibles in both Catholic and Protestant editions. Those

scheduled include the MASTERPIECE BIBLE with 95 famous religious paintings and the REMBRANDT BIBLE with 44 color and 80 gravure reproductions and etchings. Albert Skira, the Swiss art publisher, is working out details of a new newspaper devoted to all the arts and to be published in the U.S. The format is reported to be revolutionary.

Frederick A. Praeger, Inc., publishers of this fall's intensive survey of all the arts (done in collaboration with two European firms), *The Praeger Picture Encyclopedia of Art*, have been appointed official publishers for the Whitney Museum of American Art and have two spring books scheduled under that arrangement: *Four American Expressionists* by Lloyd Goodrich and John Baur and *American Art in Our Time*.

C. G. Benjamin of McGraw-Hill has announced that his firm has formed an Art Book Department and plans to publish books in art which will command the same respect that the company has gained from its publications in science and technology. Its first major project will be an English edition of the 15-volume ENCYCLOPEDIA OF WORLD ART.

Other fall art books that should be noted are: Germain Bazin, *A History of Art* (Houghton Mifflin); Susanne K. Langer, *Reflections on Art* (Johns Hopkins); *The Last Works of Matisse*, a limited edition following the artist's wish for one posthumous volume covering his final period (1950-54) and supervised by Tériade of *Verve* (Harcourt Brace); Charles McCurdy, ed., *Modern Art: A Pictorial Anthology* (Macmillan); Jeanne Modigliani, *Modigliani: Man and Myth* (Orion); Mario Prodan *Chinese Art* (Pantheon); and Herbert Read, *Education Through Art* (Pantheon); Aline Saarinen, *The Proud Possessors* (Random).

WE WOULD like to append here a brief note on the general policy of listings in "Book Notes", together with a request that readers suggest changes or additions that would be particularly useful or interesting to them. (We appreciate those we have received in the past and have tried to incorporate them whenever possible.)

In our listing "Specifically for the Business Executive," no texts except those few especially helpful to executives and no company histories are included because of space limitations. Some thought, however, is given here to those among our readers who are in the educational area of business and economics. With this issue we added a new listing on executive health.

Our former listing "Science, Technology, and the Military" has been incorporated with "For the Informed Reader."

We would especially like to know if our readers would like listings for leisure and avocational reading—listings, for example, of Revolutionary War books or Civil War books or books on golfing, boating, hunting, fishing, bridge, and chess. Some of these figure in our future plans, but we would appreciate some affirmation of interest in them.

FOR THE INFORMED READER

LATE FALL

Werner Buedeler, OPERATION VANGUARD (Roy)

Roderick Hull Craib, WHEELS AND PEOPLE (Simmons-Boardman)

Bernard Fergusson (ed.), THE BUSINESS OF WAR: WAR NARRATIVE OF MAJOR-GENERAL SIR JOHN KENNEDY (Morrow)

Commander Paul W. Frazier, ANTARCTIC ASSAULT (Dodd)

N. R. Hanson, PATTERNS OF DISCOVERY: AN INQUIRY INTO THE CONCEPTUAL FOUNDATIONS OF SCIENCE (Cambridge)

James Jeans, PHYSICS AND PHILOSOPHY (Ann Arbor Reprint, U. of Mich.)

Clayton Knight, ROCKETS, MISSILES AND SATELLITES (Grosset)

Hillier Krieghbaum, SCIENCE, THE NEWS, AND THE PUBLIC (New York Univ.)

Robert E. Lane, POLITICAL LIFE: WHY PEOPLE GET INVOLVED IN POLITICS (Free Press)

David Lavender, LAND OF GIANTS: THE DRIVE TO THE PACIFIC NORTHWEST, 1750-1950 (Mainstream of America Series, Doubleday)

Daniel Lerner, THE PASSING OF TRADITIONAL SOCIETY (Free Press)

Israel H. Levinthal, POINT OF VIEW (An analysis of American Judaism, Abelard)

John F. Loosbrock (ed.), SPACE WEAPONS (Praeger)

Seymour Melman (ed.), INSPECTION FOR DISARMAMENT (Columbia)

Robert Michels, POLITICAL PARTIES (Free Press)

Barrington Moore, Jr., POLITICAL POWER AND SOCIAL THEORY (Harvard)

James Morgan, OUR PRESIDENTS (2d ed., Macmillan)

Charles Neider (ed.), THE GREAT WEST (Coward)

James Nelson (ed.), WISDOM (Norton)

Leo Pfeffer, CREEDS IN COMPETITION (Harper)

Robert Phelps, HEROES AND ORATORS (McDowell)

David M. Potter, PEOPLE OF PLENTY: ECONOMIC ABUNDANCE AND THE AMERICAN CHARACTER (Phoenix)

Henry Reiff, THE UNITED STATES AND THE TREATY LAW OF THE SEA (U. of Minn.)

TWO MAJOR economic problems have especially influenced American thought since World War II. These are unions and inflation. They are particularly vexatious because (a) we are not certain how serious a threat each poses to our economic and social institutions, and (b) if they do pose a threat, we are uncertain how to deal with them—the cure may cause repercussions worse than the alleged disease. In the first place, most people would agree that unionism per se, as a device to equalize the bargaining power between labor and management, is desirable—a sort of countervailing power to check managerial excesses. But the problem is that, in certain key areas, some unions have become more equal than management. This would not be particularly serious were it not for the fact that union power has frequently been abused, and viciously so. When such power extends over a vast area, the abuse takes on national significance. Extension of union power, its centralization, and its abuse pose the central problem.

What to do about it? There are various schools of thought. The "smash-'em-up" school is obviously unrealistic in an era of mass technology and efficient intercommunications. We have less chance than ever before of creating the conditions of Jeffersonian democracy, even assuming we would be willing to pay the economic price for the political advantages in the first place.

Then there is the "pass-a-law" school. While undoubtedly helpful, this would not solve the problem. Laws require interpretation, enforcement, and continuous public support. But

> "public attention is intermittent [while] the activities and pressures of the interested parties are continuous and may wear down the purpose of the agencies while the public is looking the other way."[1] (p. 235)

With waning public support, the interpretation is susceptible to change and enforcement is apt to wane or be diverted elsewhere.

Finally there is the "democratize the union" school, which would require union leadership to be responsive to the wishes of an informed membership. But union membership has little more desire to become informed and participate actively in union affairs than stockholders in the modern corporation. Such desire cannot be forced upon an apathetic membership. Indeed in a small survey I conducted among members of the Teamsters' union, it was freely acknowledged that the leadership was corrupt and that union funds were being misused. Despite this, each of those interviewed refused to condemn the leadership, claimed the union had benefited them, and blandly admitted that they simply didn't bother to attend meetings.

It is apparent that democracy in trade unions would not be much more effective than in the corporation. Indeed faint musings that stress the reverse are currently becoming audible. That is, *strengthen* the power of union leadership and trust that it will become more responsible along the lines of development of corporate management. Freedom from paying heed to the carping complaints or short-sighted views of the membership certainly creates conditions that *permit* a wider perspective. There is however no guarantee that this will occur, and the recent evidence of abuse of strong centralized power in the Teamsters' union will result in curt dismissal of this solution. Yet if we cannot smash-'em-up and cannot democratize them, then we must try to engender a social conscience in their leaders. Some new laws plus much time and patience are required. We tolerated the "robber barons" for a long time, so it is possible that we may be able to tolerate and outlast the new robber elite.

WHEN we turn to inflation similar frustrations emerge. We do not know how much our institutions can stand (that is, 1, 2, 3 per cent price rise per year or more) any more than we know how much union power represents an excess. Nor are we sure of the "cause" of modern inflation. Though I think the distinction between "cost-push" and "demand-pull" is tenuous (after all, "cost" is income and "demand" depends largely upon income), nevertheless it points to the institutional pressures that prevent prices from falling once they have risen and that *may* stimulate their rise. Since our main control weapons are all demand-oriented, we can never be sure whether, if exerted strongly enough, they will drive down prices or employment. Furthermore, since we cannot or will not break the economic and political power of the organizations responsible for "cost-push" (big business, big labor, and big agriculture), inflation cannot be attacked from this side. Result: frustration.

In short, we think (though we are not really convinced) that we

[1] John Maurice Clark, *Economic Institutions and Human Welfare* (New York: Alfred A. Knopf, Inc., 1957, pp. viii, 285. $5.50).

face serious threats from both inflation and unions, but we do not know what to do about either.

Three books have recently been received that deal with these basic problems. Clark's *Economic Institutions and Human Welfare*, a series of essays by one of the elder statesmen of economics, has a much broader scope than simply unionism and inflation and, in fact, examines a multitude of institutions and their impact upon welfare. Bach's *Inflation* [2] analyzes the causes, consequences, and cures of the disease; while Chamberlin *et al.* focus on the union. Though obviously the problems of welfare, unions, and inflation are interrelated, the treatment presented in these three works is widely different. Clark is scholarly, nay, gentle, recognizing the mutability of our economic institutions and man's insatiable drive to alter them. His major concern is that in the process of alteration, we may lose freedom and individuality. He stresses the need for voluntary cooperation and the need for those pressure groups no longer restrained by an "invisible hand" to recognize their responsibilities and duties. Failure to develop an ethic of voluntary (rather than coercive) cooperation leads ultimately to disruption of society or to totalitarianism. Under this view

> "disagreements are inevitable, but underlying them there must be a basic general agreement on the conditions necessary to the health of the system, and a willingness to support them and to check the pursuit of private interest short of inflicting serious damage on these basic essentials without robbing this motive of its dynamic force." (p. 71)

Clark's view is therefore highly moralistic. In our search for increased welfare in a society where pressure groups abound, where power is highly concentrated, the acquisitive instinct must be tempered or a kind of economic civil war results. This taming of the profit motive requires a new ethic, a development of "enlightened self-interest" or a social conscience.

The book abounds with "gentle wisdom." It is eminently balanced, reasoned, and reasonable. Being a series of essays written at various times it is somewhat disconnected, but throughout runs a note of hope—we can achieve further welfare and preserve freedom and world peace if we use our intelligence and practice the moral virtues. In the Epilogue he closes with these words:

> The road beyond lies through dark and dangerous chasms: and whether they [Adam's children] will win through, it is not given to us to know. If they do, they may come to the tree which bears the knowledge how worlds may be made in which man may safely live. Only then—if their search succeeds this far—may they be ready to reach out to the tree of life which stands beyond. (p. 285)

[2] G. L. Bach, *Inflation: A Study in Economics, Ethics, and Politics* (Colver Lectures in Brown University; Providence, R.I.: Brown University Press, 1958, pp. vii, 103. $2.50).

Of quite another stripe is the work of Chamberlin *et al.*[3] Protestations by the publisher (the American Enterprise Association) to the contrary, this is largely an antilabor polemic. It consists of four essays; the first two by Chamberlin and Bradley are analytical, while the last two by Reilly and Pound are strictly legal.

Chamberlin seeks a more realistic theory of wages, one that would incorporate the institutional changes and power accretions since the 1920's. He favors "true collective bargaining" but laments the excess privileges and immunities given to unions. As a result he feels that the "public interest requires the imposition of major restraints on the monopoly power of labor." (p. 45) Yet Clark has argued that this is no answer. The difference between the two views is that Chamberlin believes that any pressure group will use all the avenues of economic gain open to it, whereas Clark has a less one-sided view of human nature. Maybe Chamberlin is more realistic, but if Clark is correct that legislation is at best a partial answer, the consequences are most dismal to envision.

Chamberlin's search for an improved analysis of wage determination leads him to emphasize that what is needed is "a parallel treatment [of] profits and wages, both as costs on the one hand, and on the other as possibly containing elements of surplus." (p. 35) Chamberlin is quite clearly of the opinion that unions bear a large responsibility for inflation and that they push up wages faster than would be the case in their absence. (p. 29)

On the whole, Chamberlin is the least dogmatic of the four authors, as befits his highly respected position as a professional economist. He accepts unionism as necessary and desirable. His only complaints are the "striking extension of labor power far

[3] Edward H. Chamberlin, Philip D. Bradley, Gerard D. Reilly, and Roscoe Pound, *Labor Unions and Public Policy* (Washington: American Enterprise Association, 1958, pp. 177. $4.50).

FOR THE INFORMED READER

LATE FALL

Oliver Reiser, INTEGRATION OF KNOWLEDGE (Sargent)

Albert Schweitzer, PEACE OR ATOMIC WAR? (Oslo broadcasts of April, Holt)

John Paul Scott, AGGRESSION (Chicago)

Charles S. Slichter, SCIENCE IN A TAVERN: DIVERSIONS ON SCIENCE IN THE MAKING (U. of Wis.)

A. A. Sternfield and others, SOVIET WRITINGS ON EARTH SATELLITES AND SPACE TRAVEL (Citadel)

Cushing Strout, PRAGMATIC REVOLT IN AMERICAN HISTORY (Becker and Beard, Yale)

Edward Taborsky, CONFORMITY UNDER COMMUNISM (Public Affairs)

A. J. P. Taylor, TROUBLE MAKERS: DISSENT OVER FOREIGN POLICY 1792-1939 (Indiana)

Rexford G. Tugwell, ART OF POLITICS (Doubleday)

Barbara Ward, FAITH AND FREEDOM (Image)

Everett Webber, ESCAPE TO UTOPIA (Hastings)

Alfred North Whitehead, THE FUNCTION OF REASON (Beacon)

Lin Yutang, THE SECRET NAME (Weaknesses of Western foreign policy in coping with communism's appeal to the peoples of the East, Farrar)

EARLY WINTER

Cleveland Amory, WHO KILLED SOCIETY? (Harper)

Michael Amrine, THE GREAT DECISION (covers events between Truman's decision to use atomic bomb and actual dropping on Hiroshima, Putnam)

N. J. Berrill, YOU AND THE UNIVERSE (Dodd)

Wilfred E. Binkley, THE MAN IN THE WHITE HOUSE: HIS POWERS AND DUTIES (Johns Hopkins)

Anthony T. Bouscaren, A GUIDE TO ANTI-COMMUNIST ACTION (Regnery)

Lewis Broad, WINSTON CHURCHILL: THE YEARS OF PREPARATION (Hawthorn)

Russell M. Cooper (ed.), THE TWO ENDS OF THE LOG (On education, U. of Minn.)

Gerald W. Elbers and Paul Duncan (eds.), SCIENTIFIC REVOLUTION (Public Affairs)

John Gates, THE STORY OF AN AMERICAN COMMUNIST (Nelson)

Andrew Grant, SOCIALISM AND THE MIDDLE CLASSES (International Pub.)

Neal Gross, WHO RUNS OUR SCHOOLS? (Wiley)

Holman Hamilton, WHITE HOUSE IMAGES AND REALITIES (U. of Fla.)

William D. Hassett, OFF THE RECORD WITH F.D.R., 1942-1945 (Rutgers)

Louis Henkin, ARMS CONTROL AND INSPECTION IN AMERICAN LAW (Columbia)

Gerald Holton (ed.), SCIENCE AND THE MODERN MIND: A SYMPOSIUM (Beacon)

Aldous Huxley, BRAVE NEW WORLD REVISITED (Harper)

Herbert H. Hyman, POLITICAL SOCIALIZATION: A STUDY IN THE PSYCHOLOGY OF POLITICAL BEHAVIOR (Free Press)

Fred Charles Ikle, THE SOCIAL IMPACT OF BOMB DESTRUCTION (U. of Okla.)

Henry Jarrett (ed.), PERSPECTIVES ON CONSERVATION (Johns Hopkins)

Howard Mumford Jones, REFLECTIONS ON LEARNING (Rutgers)

Oscar Kraines, FIRST MAJOR CONGRESSIONAL INVESTIGATIONS TO REORGANIZE THE EXECUTIVE BRANCH (Bookman)

beyond that involved in mere collective bargaining with an individual employer, the concentration of this power and the prevailing public attitude of indulgence toward labor unions generally." (p. 17) Yet in no sense does he contribute toward realism in wage theory nor does his solution—pass a law—appear appropriate.

The caliber of the analytical performance deteriorates rapidly in Bradley's essay, which analyzes the "free rider" argument advanced by unions to support involuntary unionism. Generally, it is a piece of sophistry requiring a degree of precision in assessing relative costs and benefits (to individuals) impossible in any contract or regulation of general application. Furthermore, it is based upon two assumptions: (a) that individuals are rational and (b) that they have the ability to look after themselves. Even if we accept the first assumption, unless this also carries prescience with it, the second is patently absurd in a highly complex and technical society. Many rational people were wiped out by the Great Depression, and many rational people buy drugs and other items that may be harmful to them simply because of an inability to know their precise qualities or ingredients. Thus we have social security and pure food and drug laws. Freedom is limited by these things, but few would deny that welfare is damaged.

But of more interest is Bradley's contention that unions do not benefit the workers in unionized industries. His argument is that unions do not create or obtain benefits greater than would have been the case in the absence of unionism, so that the nonunion member in fact receives nothing free: Hence the free-rider argument collapses. This may be true in a strict pecuniary sense. Indeed many people have pointed to the relative constancy of wages as a percentage of GNP and to other data that show no greater wage gains in unionized than in nonunionized industries. But if Bradley is

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William J. Lederer and Eugene Burdick, THE UGLY AMERICAN (Norton)

Donald R. McCoy, ANGRY VOICES: LEFT-OF-CENTER POLITICS IN THE NEW DEAL ERA (U. of Kansas)

Samuel Eliot Morison, LEYTE: JUNE 1944—JANUARY 1945 (Vol. 12 in the History of the United States Naval Operations in World War II, Little)

Russell B. Nye, MIDWESTERN PROGRESSIVE POLITICS (Michigan State)

Harry and Bonaro Overstreet, WHAT WE MUST KNOW ABOUT COMMUNISM (Norton)

Paul Peeters, MASSIVE RETALIATION (Regnery)

Frank Purcell, THE SCHOOLS IN AMERICA (Criterion)

Harry H. Ransom, CENTRAL INTELLIGENCE AND NATIONAL SECURITY (Harvard)

Anne Roe and George Gaylord Simpson, BEHAVIOR AND EVOLUTION (Yale)

Bertrand Russell, GOOD CITIZEN'S ALPHABET (Philosophical)

David J. Saposs, COMMUNISM IN AMERICAN POLITICS (Public Affairs)

Tom Slick, PERMANENT PEACE: THE CHECKS AND BALANCES PLAN (Prentice)

E. Openshaw Taylor, NUCLEAR REACTORS FOR POWER GENERATION (Philosophical)

H. L. Trefousse (ed.), WHAT HAPPENED AT PEARL HARBOR? (Twayne)

Edward Wagenknecht, THE SEVEN WORLDS OF THEODORE ROOSEVELT (Longmans, Green)

General Albert C. Wedemeyer, WEDEMEYER REPORTS! (Holt)

Gustav A. Wetter, DIALECTICAL MATERIALISM: A HISTORICAL AND SYSTEMATIC SURVEY OF PHILOSOPHY IN THE SOVIET UNION (Praeger)

George Williams, SOME OF MY BEST FRIENDS ARE PROFESSORS (Abelard)

Raymond Williams, CULTURE AND SOCIETY (Columbia)

Lloyd S. Woodburne, PRINCIPLES OF COLLEGE AND UNIVERSITY ADMINISTRATION (Stanford)

Frank Lloyd Wright, THE LIVING CITY (A completely rewritten and expanded version of his classic work on the city "When Democracy Builds," Horizon)

LATE WINTER

John A. Armstrong, SOVIET BUREAUCRATIC ELITE (Praeger)

Raymond Aron, ON WAR (Doubleday)

Nora Barlow (ed.), THE AUTOBIOGRAPHY OF CHARLES DARWIN (Harcourt)

Michael K. Clark, ALGERIA IN TURMOIL: A HISTORY OF THE REBELLION (Praeger)

Clough, ECONOMIC DEVELOPMENT OF WESTERN CIVILIZATION (McGraw)

Herbert S. Dinerstein, WAR AND THE SOVIET UNION (Praeger)

Robert S. Elegant, THE DRAGON'S SEEDS (St. Martin's)

Vivian Fuchs and Sir Edmund Hillary, THE CROSSING OF ANTARCTICA (Little)

Lewis Kimmel, FEDERAL BUDGET AND FISCAL POLICY, 1789-1958 (Brookings)

Raymond E. Lindgren, UNION, DISUNION, REUNION: NORWAY, SWEDEN, AND SCANDINAVIAN INTEGRATION (Princeton)

Earl Mazo, RICHARD NIXON (A political and personal portrait, Harper)

Dr. Theodor Reik, THE COMPULSION TO CONFESS (Farrar)

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correct we then have an interesting contrast with Chamberlin and others who argue that unions contribute to cost-push inflation. On the one hand, unions are accused of raising wages faster than productivity and hence providing excess benefits to those operating under collective bargaining agreements and, on the other hand, they are accused by Bradley of *not* providing excess benefits! The degree of flexibility of those interested in deprecating unions is wondrous to behold. I suggest that no one knows for sure which of these two propositions is correct, but it scarcely needs demonstration that we cannot have it both ways. Besides, union benefits extend much beyond the strictly pecuniary level; Bradley ignores this entirely.

SPACE precludes discussion of the essays by Reilly and Pound, the former being descriptive of the confusing overlap between state and federal jurisdictions in labor matters, and the latter arguing that the legal immunities of present-day labor are analogous to that of the king in medieval society and, hence, should be removed.

Bach's study is an excellent short summary of inflation. It is entirely undogmatic, restrained, and nontechnical—which makes it especially suited to anyone wanting a balanced view. Bach argues that the impact of "moderate" inflation on aggregate output, income, and wealth redistribution is probably not severe. But *galloping* inflation does entail serious consequences and inequities. The real problem is therefore to prevent the moderate variety from becoming violent. So long as the public suffers from the "money illusion," he feels that this will represent a strong anti-inflationary weapon, though of course monetary and fiscal policies are required. But,

> "in the end, only voluntary consensus on the advantage of price stability and the illusory nature of the gains from persistent inflation can provide a reasonable chance of both high level employment and stable prices." (p. 95)

Thus, like Clark, Bach relies on voluntary self-restraint by the various pressure groups. The solution to most of our economic problems in a world where "natural" impersonal market restraints have diminished significantly apparently lies in the application of ethical values on a voluntary basis.

Herein lies the major difference between Bach and Clark on the one hand and Chamberlin *et al.* on the other. The latter stress coercive restraints on the abuse of power rather than voluntary restraint through an "enlightened outlook." The one is short-run, the other long-run. Indeed, the two approaches may be complementary, that is, short-run coercion may stimulate longer-run morality. But ultimately Clark and Bach are correct as far as solving problems in a democratic society is concerned. This may be a pretty slender reed upon which to base the future of our institutions, but under present circumstances there seems to be no other workable alternative.

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